Clinical Lectures
ON
BLOODLESS OPERATING,
AND
BLOODLESS OPERATIONS AS ILLUSTRATED BY THE USE OF THE GALVANIC CAUTERY.

Delivered in Guy's Hospital,

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LECTURE II.—PART III.

ON THE TREATMENT OF HÆMORRHOIDS, PROLAPSUS RECTI, AND FISTULA IN ANO WITH THE GALVANIC CAUTERY.

THE surgical treatment of these affections of the anus and rectum has been much simplified by the introduction of the galvanic cautery, and cases of hæmorrhoids and prolapsus recti, however well they may otherwise be clamped and cauterised, can with it be treated with greater facility, confidence, and success.

Cases of fistula in ano, by means of the same instrument, can likewise be divided in a simple and bloodless way, with less pain at the time than that caused by the knife, and less subsequent disturbance; indeed, I am disposed to think that in the bloodless nature of the operation for fistula in ano the general utility of the instrument is well displayed, although its special value is doubtless better seen in the treatment of the cases I have already brought before your notice.

The operation for the removal of hæmorrhoids, or the cure of prolapsus recti, with the galvanic cautery, differs in no respect from that usually performed with the common cautery. The bowel to be treated is brought well down and into view either by means of the patient who is made to strain over a pan of hot water, or by an enema of warm water. The different portions of the bowel to be removed are then seized and clamped in vertical pieces radiating from the anus, each clamped portion, or rather the upper half of each portion, being then cut off with scissors. The parts are then ready for the application of the cautery—the porcelain cautery heated to a red heat. This is to be rubbed over the surface of the projecting mass till it is burned down to the level of the clamp and turned into a dry eschar; each piece is to be dealt with in order, and each clamp removed as its segment is cauterised, the whole being carefully returned and pressed into the rectum when the operation has been completed. When the cautery is efficiently applied no bleeding follows this operation, and very little pain. The pain induced after the galvanic cautery is far less than that which follows the actual cautery. During the application of the cautery the soft parts should be well protected by strips of wet lint or ivory spatulas. The following cases will illustrate many of these points.

CASE 1. *Internal hæmorrhoids; removal by galvanic cautery; recovery.* (Reported by Mr. Hardie.)—Eliza D——, aged thirty-six, married, came into Guy's Hospital under Mr. Bryant's care with extensive hæmorrhoids, which had been gradually getting worse for three years. She had lost much blood from them, both when at stool and otherwise.

On Jan. 27th Mr. Bryant applied a clamp to three distinct masses of hæmorrhoidal substance, cut off the tops of the projecting masses, and freely burnt down the stumps with the galvanic cautery. He then removed the clamps and returned the projecting bowel; no bleeding following. The patient was under the influence of chloroform. Very little pain followed the operation. On the fourth day the bowels were relieved by an enema, and on the seventeenth she left the hospital quite well.

CASE 2. *Hæmorrhoids of three or four years' standing; removal by galvanic cautery; cure.*—William T. M——, aged fifty-five, came under my care at Guy's Hospital with some large bleeding hæmorrhoids of three or four years' standing. Nothing but their removal could be entertained. He had lost a great deal of blood at times.

On July 11th, 1872, the operation was performed, the piles having been previously brought down and secured with clamps. The projecting masses were cut off, and their bases well cauterised with the platinum cautery, dry eschars being formed. No bleeding followed, and but little pain. The man left the hospital, well, in three weeks.

CASE 3. *Hæmorrhoids for thirty years; removal by cautery; cure.*—Mrs. M——, aged sixty-five, of Stratford, consulted me early in 1871 for the bleeding piles, with which she had been troubled for thirty years. For the last ten she had suffered frightfully from them, being hardly able to stand or walk without their descent and loss of blood.

On March 27th, 1871, with the assistance of Dr. Drake, I removed the mass in four sections, each division having been clamped, cut off, and freely cauterised with the galvanic cautery. A steady recovery ensued, and the patient is now quite well.

CASE 4. *Bleeding hæmorrhoids; removal by means of clamp and galvanic cautery; recovery.*—In February, 1872, Miss L——, a middle-aged lady, consulted me for a troublesome hæmorrhoidal tumour, which had been steadily increasing for some years, and had been the cause of her losing much blood. On Feb. 16th, with the assistance of Mr. Jackson, of Highbury, I removed the mass in two parts by means of the clamp and galvanic cautery. The operation was almost bloodless, and was followed by rapid and complete recovery.

CASE 5. *Hæmorrhoids for twelve years; removal by clamp and galvanic cautery; recovery.*—Grace B——, aged thirty-seven, came under my care in May, 1872, for bleeding piles of twelve years' standing. On June 7th they were removed by means of the clamp and galvanic cautery in three masses. On June 13th the bowels acted painlessly, and by the 20th the parts had healed.

CASE 6. *Hæmorrhoids; clamp and cautery; recovery.* (Reported by Mr. W. Brown.)—Henry E. O——, a shoemaker, aged fifty-four, was admitted into Job ward on March 18th, 1873, with an oval-shaped tumour situated at the orifice of the anus, about two and a half inches in length. It is divided into two parts: an outer, where the mucous membrane covering it is pale in colour and lobulated; and an inner, where the mucous membrane is red, very tender, and bleeds a little.

The patient had a chancre thirty-six years ago, but does not suffer from sore-throat nor from pains in his bones. About twenty-eight years ago, whilst fighting, he received a blow on the back in the right lumbar region, which gradually became painful and then swollen, and he was treated for it in this hospital by Mr. Cock; after this he remained quite well until seven years ago, when he noticed he had a tumour about the anus. He came as an out-patient, and it was tied and cut off. Three years ago he again noticed a tumour about the anus, which came down when he walked about, but he could easily reduce it.

On the 22nd March the patient was put under the influence of chloroform, and the inner tumour was clamped and burnt with the cautery. The folds of the skin about the anus were subsequently very œdematous and swollen, but by April 7th these symptoms had subsided, and on the 14th he passed a motion without pain or any bleeding, and he left the hospital. He returned to show himself a fortnight later, when he was quite well.

CASE 7. *Hæmorrhoids; operation by galvanic cautery; well.* (Reported by Mr. G. W. Butler.)—John C——, a photographer, aged twenty-nine, was admitted into Job ward on the 10th of November, 1873, with hard and enlarged glands in the neck, and piles, which bled when he passed a motion. His bowel also came down when he was relaxed. It appeared that he had suffered from bleeding piles for four years, and had been under treatment, but was advised to undergo an operation. A year previous to admission he contracted syphilis. A bubo came in his right groin, which was opened; and he had suffered subsequently from sore-throat and pains in his bones. He had been accustomed to drink hard.

Dec. 12th.—The hæmorrhoids were brought down by placing the man over hot water. They came down in three masses, each of which was caught up by the clamp, cut off by a pair of scissors, and the galvanic cautery applied to the stumps. He complained for some days of pain after passing a motion, but there was no bleeding, and the external parts were quite normal. He was discharged from the hospital on the 22nd of December, cured.

CASE 8. *Prolapsus recti; removal of parts by cautery; cure.* In January, 1870, on the advice of Dr. H. Oldham, I was consulted by Miss L——, aged fifty-seven, for a severe prolapse of the rectum, with daily bleeding from the part. It had existed for sixteen years, and been steadily getting worse. The bowel came down on the patient standing.

On Jan. 27 I removed four vertical portions of the mucous membrane of the bowel, having previously clamped them and cut off the projecting folds. No blood was lost at the operation, and a rapid cure ensued. The lady was up and about well in three weeks.

Remarks.—The cases just quoted are ample to illustrate the treatment of the more ordinary forms of hæmorrhoids and prolapsus recti by means of the galvanic cautery; but under exceptional circumstances some modifications of this treatment may be called for. Thus, in cases of piles as represented by the growth of small vascular strawberry-looking tumours, I have been content with the direct application of the cautery to the growth, having exposed it well by means of a speculum; and I have found this practice a good one. In other cases, again, of prolapsus recti, I have simply scored obliquely in lines the surface of the mucous membrane of the prolapsed bowel, and returned it; and this treatment has been followed by good success, more particularly when employed in the milder forms of the affection. In cases of long standing such treatment is inapplicable. Nothing but the removal of portions of the prolapsed mucous membrane will effect a cure.

With these remarks upon cases of hæmorrhoids, I will pass on to consider the treatment of fistula in ano by the galvanic cautery; and I am pleased to say it is as simple as it is satisfactory. It is performed as follows. The platinum wire, or twist of platinum wire, is first introduced through the fistula, and I generally do this through the groove of the probed director when it has been made to pass through the fistula into the bowel. I then hook, with the finger that is in the rectum, the end of the wire downwards through the anus, and remove the grooved probe, in this way one end of the wire being made to protrude through the rectal orifice of the fistula, out at the anus, and the other through the external orifice of the fistula. The two ends of the wire are then connected with the poles of the charged battery, and the wire heated, the division of the fistula being made either by means of the écraseur, or a gentle sawing movement of the wire, or traction upon it. The wound may then be dressed with oiled lint or cotton-wool, and the case treated upon ordinary principles, the wound having simply to heal by granulation. In the following cases the above practice is illustrated.

CASE 9. *Fistula in ano treated by cautery; cure.*—Jonah C——, aged forty-six, a delicate man, was admitted into Guy's Hospital under Mr. Bryant's care in May, 1869, with a fistula in ano. It had followed upon an abscess three months previously. On May 20th Mr. Bryant divided the fistula by means of a platinum wire heated with the galvanic battery. The operation was done with facility, and was quite bloodless; but very little pain followed the operation. The wound healed rapidly, and in less than a month the man left the hospital cured.

CASE 10. *Fistula in ano; division by galvanic cautery; recovery.*—Thomas D——, aged forty-three, came under Mr. Bryant's care at Guy's Hospital in August, 1872, with a fistula in ano. It had existed for five months. On Aug. 6th Mr. Bryant laid the fistula open into the rectum by means of the galvanic cautery. He passed a probe first through the fistula, and then drew the platinum wire through the sinus, one end of the wire being brought out through the anus and the other through the buttock. The wire was then heated, and by means of a gentle drawing motion the tissues were divided. No bleeding or pain followed the operation. On the fourth day the bowels acted, and in three weeks the parts had completely healed.

CASE 11. *Fistula in ano; division of sphincter with wire of galvanic cautery; cure.* (Reported by Mr. Parker.)—James S——, aged fifty-eight, was admitted into Guy's Hospital on June 1st, 1870, with a fistula in ano of four months' standing. On June 20th Mr. Bryant divided the fistula by means of the wire heated with the galvanic cautery. He first passed a director through the fistula into the bowel, and the wire through the groove of the director, and having in this way threaded the fistula, he simply, by a gentle drawing motion, made the wire burn its way out, having heated it by connecting the two ends of the wire with the battery. An excellent recovery followed. Not a drain of blood was lost during the operation, no dressings were required after it, and a very insignificant amount of pain was experienced.

Mr. Bryant has now treated many fistulæ in this way, and thinks highly of it in patients with the hæmorrhagic diathesis, or in others where any loss of blood is to be avoided.

CASE 12. *Fistula in ano; division by galvanic cautery; recovery.* (Reported by Mr. Stuart.)—John S——, aged forty-four, a cellarman, was admitted into Guy's, under Mr. Bryant's care, on July 8th, 1869, for fistula in ano. It had existed for eighteen months, and had followed an abscess. The external opening was on the right side of the anus, about one inch and a half from the orifice, and the inner opening was about one inch up the bowel.

July 17th.—The director having been passed through the fistula into the bowel, and its end made to protrude through the anus, Mr. Bryant passed the platinum wire of the galvanic cautery along the groove, and, having attached its end to the two poles of the battery, by a slight sawing motion made it cut its way out. Little or no pain followed this operation, and on the third day the patient was up and dressed; in two weeks the part had healed.

With these observations, gentlemen, I close my lecture, and I trust I have said enough to prove to you that the galvanic cautery in all its forms possesses great advantages for the treatment of a variety of affections, and that the operations performed with it may justly claim the character of being bloodless.

ON THE WASTE OF LIFE BY PREVENTABLE DISEASE.

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(*Continued from page 651.*)

THE mention of affections of the eye reminds me that some of the most important of the preventable diseases would almost, or altogether, escape notice if I were guided in my enumeration of them by the mortality returns alone. There are some, and these not the least formidable, that either do not kill at all, or that do not kill immediately, or in any proportion to their prevalence. When people, especially children, are crowded together under unnatural and insanitary conditions of living, they are prone to suffer from a very grievous malady, known as contagious ophthalmia; and the wisdom of the Poor-law Board during the last few years has developed this malady in workhouses and pauper schools in a manner to which previous English experience affords no parallel. The precise facts with regard to its prevalence are known only at Gwydyr House; and I have been credibly informed that, when a member of the late House of Commons gave private notice of his intention to move for returns showing the truth, he was told that his motion would be opposed with all the strength of the Government, and he was induced, as a matter of party allegiance, to refrain from bringing it forward. I heard this without surprise, for the truth was far too bad to bear the light. I have been able to obtain, from a private source, a copy of a report made to a Government inspector by the medical officer of one of the schools. It states, among other curious matters, that, of 1062 children in the school in question, only 182 had escaped ophthalmia; 163 had suffered from one attack of the disease, 151 from two attacks, 110 from three, 75 from four, 54 from five, 58 from six, 22 from seven, 25 from eight, 7 from nine, 11 from ten, and 204 from more than ten attacks. Concerning the ultimate results of these attacks, I have no information; but an analogous condition of things once existed in Irish workhouses, and there the facts have been made known. During the thirteen years from 1849 to 1852, 118,835 cases of epidemic ophthalmia occurred in these workhouses. Among them, sight was partially injured in 1925 cases, one eye was destroyed in 1270, and both eyes

were destroyed in 517; so that 1 in 32 of those who were affected suffered permanently in a greater or less degree. This proportion would give only 28 permanent sufferers among the children mentioned; but, in another part of the school return from which I have quoted, I find it said that, out of 1195 children, 347 had "granular lids after ophthalmia"; and I have no doubt that, in all or nearly all of these, sight would eventually be greatly impaired, and that in many it would be wholly lost. The preventable diseases that do not kill immediately, although they perhaps do more than any others to cripple and destroy usefulness, to sap the powers of life, and to produce degeneracy of offspring, belong chiefly to the enthetic class. There are well-known differences of opinion with regard to whether the legislation that would diminish these diseases would not be a greater evil than the diseases themselves. For my own part, in this case, as in most others, I should say, "*Salus populi suprema lex*"; but I have no desire to enter at present upon a much debated question, which lies beyond the limits within which I propose to confine myself. There is no difference, among those who are acquainted with the facts, on the essential point that the legislation in question, where it has been carried into effect, has diminished the prevalence of disease in a very great degree; and there can be no doubt that a still further diminution would be the result if similar legislation were extended to places in which it has not yet been enforced.

Upon the whole, then, I think I am entitled to say that the effect of preventable disease, in this country, every year, is to inflict upon the community a pecuniary tax of not less than three millions sterling, and probably of much more than that sum; to sicken at least six hundred thousand persons; to destroy prematurely at least one hundred thousand lives, many of them of the highest value; to cripple, in some way or to some extent, in mind or body, an unknown number of victims, leaving them to be more or less encumbrances to their own generation, and to be the progenitors of children who will hand down an inheritance of sickness or debility to generations yet to come; and, lastly, besides causing an incalculable amount of merely mental sorrow, to entail physical misery, destitution, social degradation, and even lapse into crime, upon many of those whose main stay in life it has destroyed. It is often a wholesome mental exercise, with reference to arrangements to which we have become accustomed, to try to stand for a moment, as it were, aloof from them, and to ask ourselves how we should regard them if they were offered to our acceptance for the first time. I think it cannot be doubted, if we could place in this light the evils and calamities that I have endeavoured in faint outline to describe, that we should all look upon them as something too monstrous to be endured with patience. We should say that they threw into utter insignificance most of the so-called great questions with which politicians occupy themselves, and that they imperatively demanded the most strenuous efforts of the highest statesmanship for their removal. But so absolute is the dominion of habit over the human mind that we now suffer these evils to flourish practically unchecked, and make scarcely a single earnest effort to control them.

To this statement it may be objected that we have had, during the last few years, a good deal of sanitary legislation, and that the subject is one that has been almost continually kept before the attention of the public. You will, perhaps, remember the old story of Tillotson's appeal to Garrick to explain to him why it was that the stage could sway the emotions so much more powerfully than the pulpit. "The reason is," said the great actor, "that your Grace utters the most sublime truth as if it were fiction, while I utter fiction as if it were truth." Now our sanitary legislation, in most of its parts, has been so constructed as to be almost inoperative; and our sanitary talk, when it has been true, has usually been uttered in the precise manner that Garrick condemned. In mediæval times, in the times of the Plantagenets for instance, several matters of importance for the preservation of the public health were well understood in England; and both Edward II. and Richard II. enacted some curt and wholesome laws, having neither the permissive character nor the ambiguous phraseology of many modern ones, for the punishment of persons who offended against the sanitary lights of those days. The time at my disposal, however, will not permit me to linger over the remote past; and I must come at once to that great measure, the foundation of almost everything that has been done for the diminution of disease in our own day, the Registration Act of 1837. Until this Act came into operation, and indeed until it had been in operation for a considerable time, there were no data, outside the metropolis itself, on which sanitary reform could be founded; for no one knew with any approach to accuracy, or in any other manner than by conjecture, even the probable extent of the evils against which the law was required to contend. The reference of deaths to their causes is still, in many respects, less accurate than could be wished; but the errors probably counterbalance each other to a great extent, and I have been able to-night to place before you certain figures expressing mortality, and to found upon them certain estimates about cost and prevalence, with full confidence that I could not far mislead you. The revelations made by the national death registry speedily had the effect of calling attention to the ravages of preventable disease; but it happened, most unfortunately, that the question somehow became the property of a comparatively small coterie of persons, possessing, indeed, much sincerity and earnestness, but not gifted with minds that could in any high sense be called philosophical, singularly prone to the sins of premature generalisation and of presumptuous judgment, and altogether abandoned to the belief that they were the sole depositories of knowledge on the subjects that they had contrived to make their own. Such, I think, is not an unfair description of the curious organisation that was denominated the General Board of Health, and that bore sway in England from 1848 to 1858. Its brief reign was characterised, if not by the origin, at least by the first currency of a strange delusion, which has ever since prevailed extensively, and which has been the fruitful parent of an infinity of mischief. This is the erroneous belief that the requirements of preventive medicine are of such a nature that they may easily be understanded of the people, and easily put in force by any unskilled person. The General Board of Health may be said to have staked its existence on the dogma that dirt is the cause of disease; and wherever disease was rampant, the Board, instead of sending an expert to trace it to its origin, sent an inspector, an engineer, a lawyer, an amateur, or what not, to look for dirt. If he found a muck-heap within a mile of an epidemic, the inspector would feel that he had not only done all that could be required of him, but that he had even exercised extraordinary acuteness of observation, and that he had furnished an exhaustive explanation of the occurrences. If when the muck-heap was removed the epidemic did not cease, it clearly ought to have done so, and the case was so much the worse for the facts. The General Board of Health arrived at the further conclusion that an accumulation of excreta constituted the most noxious form of dirt, and that the best method of disposing of excreta was by means of watercloseets. Their inspectors, therefore, whenever they were asked to advise for the improvement of the health of a locality, advised the immediate adoption of a watercloset system. It did not matter whether the prevailing maladies were actually due to faulty methods of dealing with excreta, or to other and wholly different causes; and it mattered still less whether the necessary water-supply could be procured, or what might be the ultimate destination of the sewage. The panacea was in all cases the same, and its perpetually recurring failures were attributed only to its imperfect application. The whole business was like Albert Smith's description of an extinct animal called a "grinder," some specimens of which still lingered upon the earth when I was young, and were engaged in preparing medical students for examination at the "College" and the "Hall." Albert Smith's grinder had told his class that carbonate of lime was the best antidote for certain corrosive poisons, and that, if asked what they would do when chalk was not immediately procurable, they were to say that they would scrape whitewash from a wall with a fire-shovel. "It sounded practical, and would please the examiners." He then turned briskly to a shy and reticent student, and said: "Now, Mr. Meek, what would you do if you were sent for to a man who had hanged himself?" "Please, Sir," said Mr. Meek, "I should scrape the wall with the fire-shovel." And I have no doubt that the prototype of Mr. Meek, if not actually a member of the General Board of Health, was at least one of its most trusted inspectors. Some of us, doubtless, have heard Dr. William Budd describe his inquiries

into the origin of the Cowbridge fever. This fever attacked a number of ladies and gentlemen, who, in November, 1853, it being race week at Cowbridge, had attended two balls held at the principal inn there. No less than eight of the sufferers died; and, as they were all people of some wealth and station, the occurrence attracted much attention, and the General Board of Health sent down an inspector. The ball-room had been made by the temporary conversion of a loft over a large stable; and to this stable the inspector ascribed the fever. Dr. Budd proceeded to the place, as if he were a chance traveller, and discussed the outbreak over a glass of wine with the landlady. He soon ascertained from her that, although the disease had originated in the stable, no horses had died, and no helpers had been attacked. By skilful cross-examination he discovered that a gentleman had been ill with typhoid in the hotel before the balls, and had left, when barely convalescent, in order to escape from them. His excreta had been conveyed into a cesspool that leaked directly into a certain well; and the water from this well had been used in making beverages for the dancers. The members of the Board of Health, however, notwithstanding such evidence as this, had an almost personal hatred for facts that supported a belief in contagion, or in anything but dirt; and they used their whole influence, and their whole printing power, during a period of ten years, for the purpose of discrediting everything that told against the hypothesis they had espoused. They greatly injured and retarded the cause of sanitary reform, by furnishing a signal example of how little those who professed to be authorities might really be worthy of trust, and by supplying a tangible ground for the scepticism of common-sense people. But they, nevertheless, did good service, partly by accustoming the public mind to the idea that some legislation about health was really called for, and partly by directing attention to the enormous prevalence of preventable disease.

About the same time that the Public Health Act, by which the General Board of Health was created, received the sanction of the Legislature, an Act was also passed which empowered the Commissioners of Sewers for the city of London to appoint a medical officer of health. The office was conferred upon Mr. Simon, who held it until 1857, when, the General Board of Health having at last discovered its need of medical advice, he was appointed to be its medical officer. In the following year, when the General Board of Health was extinguished, he was transferred to the headship of the Medical Department of the Privy Council.

It is very difficult, in the case of one who is still living in our midst, to speak with the impartiality of history concerning the quality of his work. But the office with which you have honoured me demands that I should at least strive to fulfil its obligations, and Mr. Simon forms the central figure in the picture that I have next to draw. Already, in 1848, a distinguished pathologist, and surgeon to a great hospital, he was not to be deluded by the shallow sophistries that prevailed among men in authority. He saw, with the clear insight of genius, that many of the questions concerning which it was fashionable to dogmatise were insoluble; some, perhaps, from their very nature, some from lack of evidence; and that, with regard to the latter class, the one thing needful was patient and careful investigation, conducted by trained scientific inquirers. He saw that an epidemic outbreak, instead of being at once traceable to the presence of a midden, was probably the ultimate result of a large number of concurring conditions, among which, indeed, the midden might play a part, but each of which required to be studied in all its bearings. He saw that this study, in order that it might be conducted fruitfully, required certain kinds of knowledge and certain habits of mind; and that the unverified conjectures which engineers and lawyers described as their opinions about the causes of disease were simply so much rubbish, impeding the footsteps of the genuine and competent inquirer. During his period of duty, as medical officer of health for the City, Mr. Simon succeeded in removing from his district nearly all the manifestly unwholesome conditions that had before prevailed there, while he yet committed himself to no more than this, that the arrangements which he condemned were necessarily evils in some degree, and that they ought to be altered for the better. He published nine successive annual reports, which have ever since been accepted as types of what such reports should be; and, above all, he made no mistakes. During his whole official career, I do not remember a single sanitary matter in which he has ever jumped to a conclusion, in which he has ever gone a step farther than carefully observed and well recorded facts would carry him, or in which his opinion, once given, has either been overturned in controversy or falsified by events. When he became chief Medical Officer of the Privy Council he proceeded to organise a staff of competent observers for the investigation of disease; and, by the aid of such men as Buchanan, Seaton, Radcliffe, and Burdon Sanderson, he set himself to unravel the profoundly difficult and complicated questions that surround the origin and propagation of epidemics. The department of which he was the head became a training school, in which young medical men were taught how inquiries of this kind should be conducted, and by what sources of error they were beset. The junior inspectors, selected on account of their presumed or proved aptitude for scientific research, when employed in investigating the origin and diffusion of local outbreaks of disease, had the great advantage of being able to submit their draft reports to the criticism of their immediate chief, by whom probable sources of error were pointed out, and doubtful questions were suggested as matters for further inquiry, before the reports were laid before the Parliamentary head of the department, and were finally adopted and issued as its work. In this manner was brought about the absolutely unrivalled accuracy for which these documents have been distinguished, and which has caused the yearly volumes containing them to be in a demand far exceeding the supply, as the most precious records of methodical sanitary investigation. Unlike the General Board of Health, the Medical Department of the Privy Council has had no theories, and its function has been only to learn and to declare the truth. Even in such matters as the propagation of cholera and of enteric fever by water contaminated with excreta, it has done nothing more than to establish what has actually occurred in this place and in that, never affirming that a different order of events might not be found elsewhere. Its inspectors, when called upon to advise for the improvement of the health of a locality, have had no universal panacea, either water-closets or any other. They have not scraped the wall with the fire-shovel. They have everywhere inquired into the existing conditions, in the same manner in which they would have inquired into the symptoms of a patient, and they have prescribed with reference to the facts that their inquiries brought to light, meeting local authorities in a spirit of cordial sympathy with their difficulties, and always helping them to do what was best in the actual circumstances of the case. When, for instance, the question has been one of the disposal of excreta, the medical inspectors have told local authorities how similar conditions have been met elsewhere, by what methods and with what success, and have thus brought the experience of all England to bear upon the wants of each place to which their official duties have called them. As a whole, therefore, the department was both a place of research in which certainties were surely, if slowly accumulated, and a furnace in which sanitary knowledge was tried, and in which the errors of hasty generalisation were exploded. At the same time, it was a centre which had established the best relations with local authorities all over the country, and its officers were hailed as friends in council wherever they bent their steps. Besides this, the supervision of vaccination had brought the medical inspectors of the Privy Council into contact with medical men all over England, on a system which ought to have furnished a model for the relations to be established between the Central Department and the medical officers of health. When Mr. Simon took charge of vaccination, it had been brought to the lowest depths of muddle by the mismanagement and the parsimony of the Poor-law Board, and was in many places very carelessly and inefficiently performed. But, after a while, each public vaccinator found himself visited by an inspector of his own profession, whom he was compelled to recognise as being perfectly master of the matters to be inquired into, who supervised his work, who pointed out his errors, who recognised and was able to reward his merits, who advised him in his difficulties, who guided him along the road which he ought to travel, and who was a consultant to whom at all times he might refer. The result has been that the vaccinators, no longer scattered units, are all working upon

the same lines for the attainment of the same ends. The standard of vaccination has been greatly raised, and we may reasonably look forward to a time when the operation will no longer be in danger of falling into disrepute from inefficient performance, or of conveying other diseases from the careless selection of vaccinifers. Such services would, I need hardly say, in any other country, have secured to him who had rendered them an honoured position in the State; but with us they have been left unrewarded, and, save by the homage of all capable of appreciating them, unnoticed. Mr. Simon is recognised over the whole civilised world as one of the first of scientific Englishmen, as the greatest authority, past or present, upon everything connected with preventive medicine, and as the source of nearly everything that is certainly known concerning the origin and modes of propagation of epidemic disease. From the height of this eminence he has had to do battle, for the very existence of his Department, with an adversary who is no more than a party politician. But in thus saying I somewhat anticipate my story.

(To be continued.)

THE PROGRESS OF HEART DISEASE.

BY J. MILNER FOTHERGILL, M.D., M.R.C.P.

THE correct diagnosis of the various forms of heart disease is a subject which has of recent years attracted all the attention that its importance demands. Every physical sign is carefully noted, until we have arrived at a point where physical signs preponderate unduly over rational symptoms. Not only so, but the value of physical signs which throw light on the progress of the disease—signs of the utmost importance—is too often insufficiently appraised by comparison with that of signs possessing little more than a doubtful diagnostic value. For instance, how much less is written about the significance of a secondary mitral murmur, consequent upon aortic disease, than upon questionable signs of the existence of mitral stenosis with its occasional presystolic murmur; and yet no comparison exists as to the importance of these two. Opinions vary as to the respective gravity of mitral stenosis and of mitral regurgitation, the consequential changes (*rückwirkung*) set up in each case being almost identical; but no difference of opinion exists about the serious nature of a mitral murmur showing itself in the course of aortic disease. Here we know that the mitral valves, exposed to the force of an hypertrophied ventricle, take on the changes which so commonly result when the different parts of the circulatory system are subjected to strain, and become thickened and distorted by a growth of pathological connective tissue; a process spurred on by their being closed by the aortic systole, the blood rushing backwards through the imperfect valves, as well as normally by the systole of the ventricle.

It is during the later stages of the case that the murmur is heard which tells us that the hypertrophied wall is yielding—undermined by a steadily progressing structural degeneration. The mitral valve is so perfect as to admit of its being somewhat affected by disease ere it becomes incompetent, and so long as the dilating process of the ventricle is arrested by hypertrophy it remains sufficient; but when degeneration has lifted hypertrophy's arresting hand the process of dilatation recommences, never again to be arrested either by nature or art. In ordinary dilatation, Rokitansky tells us that the valves stretch *pari passu* with the yielding of the ventricles; but it is not so here. The valves, bound down by pathological connective tissue, non-distensible, and so unlike normal connective tissue, do not stretch along with the walls and ostia, and the valve becomes insufficient. Surely the importance of a systolic mitral murmur showing itself under such circumstances is unmistakable; its prognostic indications being of infinitely more importance than its mere diagnostic value.

Were the rational consideration of heart disease made as much a subject of study as the mere diagnosis, matters would be different. Of what practical value is a diagnosis, however elaborate and praiseworthy, which throws little or no light on the case as regards its origin and progress, as compared to one which lights up both, and affords distinct indications for treatment? Were heart diseases utterly divorced from general conditions, instead of being, as they are, not only intimately bound up with them, but often, indeed, being but a part of a general condition, as in the hypertrophy of chronic Bright's disease, such mere diagnosis might be serviceable; but as matters really stand, the heart disease must be looked at in its relation to general conditions. It is doubtless more striking, and possibly much easier, to point out to classes of students the various physical signs which may be detected by a practised and skilful auscultator and percussor, than to give them a comprehensive view of the nature of the case, its causation, its past history, and its probable progress; even if it be granted that the students could follow him, and thus be able to benefit by his exposition—a matter open to much question. "Manipulations which strike the senses of the attendants and more than one sense of the patient—examinations which may be seen, felt, and talked about—have a much more impressive and lasting influence upon both patient and spectators than the close observation of symptoms and pertinent inquiries of the profound and comprehensive thinker" (Copland). While the physical examination is a really important matter, it must not be allowed to thrust its more important but less ostentatious coadjutor out of court. Something, too, lies in this: a chronic heart case alters but little, in many instances, during the few years of a student's career, and only intermittent views of it are permitted by circumstances; and only one who has thought much as well as laboured hard at the subject could, from an occasional isolated view, construct a fairly accurate account of the past changes and the probable future. The darkness which hangs over the past, and shrouds the future from our sight, must be illumined by his acquaintance with the progress of similar cases, his knowledge of the subject in its entirety. In the same way that a geologist, when finding a certain fossil in a shale-bed, tells confidently from its presence there that that shale-bed points to no coal-seams beneath, because he knows well that this fossil is found only during the lowest coal-formations, and consequently knows that the shale-bed in which it is found indicates the exhaustion of the coal measures and not their inauguration. Similarly the presence of a tricuspid "whiff," no matter how faint, in connexion with mitral disease, tells us that the later stages of the disease are being entered upon.

Where it is possible, which is most frequently the case in private practice, repeated examinations of a patient suffering from heart disease are clearly indicated; not only for the patient's own sake, but also for the advantage of the medical man, in order that he may familiarise himself with the progress of such cases; the stationary character of the morbid changes carrying hope, at least as to time; the addition of a new sign or symptom lending gravity to the case. How ominous is the oncome of palpitation on effort in a case where hypertrophy has long existed, endowing the patient with capacity for exertion; how significant of structural changes for which there is no compensation, and which are unamenable to, and unaffected by, treatment. And then, when in time the pulse becomes irregular, and lastly intermittent, who can any longer hold out hopes, or form any other opinion but that the beginning of the end is at hand. Or, again, when œdema, which has yielded to treatment, commences again to show itself while the treatment is being continued, who doubts its significance, or undervalues its prognostic indications?

Of equal importance are several physical signs only to be detected by careful examination. The important indications of a mitral systolic murmur presenting itself during the course of aortic disease have been given above. By similar examination we learn that, though a mitral murmur may be no louder than before, there is now accentuation of the pulmonary second sound, which tells us of increased tension in the pulmonic system; while further examination may reveal to us enlargement with increased power in the right ventricle, and so lend an element of hope to the case, from this compensating growth. Indeed, accentuation of the pulmonary second sound is a safer guide to the amount of mitral disease than the mere murmur, because it is more strictly associated with the amount of disease than is the mere loudness of a murmur, which may be due almost entirely to

a roughened surface.* When there is an enlarged area of percussion dulness it tells of hypertrophy or dilatation, commonly combined in various proportions. Where the apex is small, well away to the left, the impulse good and steady, we recognise true hypertrophy; but when that apex beat becomes more diffused, less powerful in its stroke, and less regular in its rhythm, we know that dilatation is going on, probably resistlessly. How much information is afforded by observing the effect of a few brisk turns round the room in bringing out palpitation and irregularity of rhythm in a patient with mixed hypertrophy and dilatation; how significant is the palpitation, the active sign of debility, especially when associated with an enlarging area of percussion dulness.

Comparison of the heart's impulse with the radial pulse will often give us valuable information; where the pulse is out of proportion small in comparison with the heart's impulse, it tells us the enlargement is chiefly in the right side; when irregularity of rhythm is found in the heart rather than the radial pulse, it is associated rather with the right side than the left heart. The exaggeration of the pulse, as well as its retardation, by arterial atheroma, is an indication often of great value, and lights up the nature of the case amazingly. These apparently trifling comparisons are often finger-posts indicating to us the direction the case is taking. In one well-marked and well-remembered case in a near relative the impulse of an hypertrophied left ventricle was so exaggerated by atheromatous arteries that the hard and unimpressible pulse indicated to a stranger depletion, even when irregularity of rhythm coexisted, while the acquaintances knew that stimulants were demanded.

The importance of venous pulsation, especially in the jugulars, is often great; it is much more serious than a mere wavelet of movement from the contraction of the right ventricle ere the tricuspid is closed. We know that veins will resist a great pressure applied once in experiment, but they yield readily to a steadily maintained pressure, as we so often see in varicose veins of the lower extremities especially; and when the large veins become subject to continuous distending action, as is the case when an imperfectly closing tricuspid exposes them to the full force of an enlarged right ventricle, dilatation of them follows; and then the insufficient valves leave the organs behind, protected normally from regurgitation of blood by these venous valves, to all the consequences of venous engorgement. Nor must any impression as to "the safety valve action of the tricuspid," the outcome of the brilliant but imperfect, and, in consequence thereof, erroneous, experiments of Wilkinson King, blind us to the seriousness of tricuspid regurgitation. King's early death cut him off ere he himself had time to learn the errors in his theory, of which, had he lived, no one would have been more conscious than their accomplished originator.

* Mere loudness of murmur is of little real moment. Recently I had an opportunity of examining two cyanotic brothers. One had a loud systolic murmur, but was a bright, active little fellow, able to run about famously, nothing but his blue face and loud murmur telling of any abnormality. The other had but a faint, low murmur, but his was a much more serious case. He went upstairs to bed on his father's back, and all exertion was painful and led to syncope; in order that he could amuse himself by reading he had to lie on the couch, and repetition of many pieces of poetry which he had committed to memory was only practicable in the recumbent posture, where the brain was as free as the rest of the body from the effect of gravity upon its blood-supply; in the erect posture the weak circulation could not maintain a sufficient blood-pressure on the brain to render remembrance practicable.

(*To be continued.*)

DEVON AND EXETER HOSPITAL.—The local Medico-Chirurgical Society had a most successful *conversazione* on the 11th, attended by nearly a hundred members of the profession, in addition to numerous guests, including the mayor and several members of the cathedral body. There was a capital display of instruments from Arnold, Ferguson, Krohne, Salt, Ferris, Millikin, Maw, &c., as well as from the local men. In one room, which was devoted to demonstrations on electrical apparatus, considerable interest was evoked by the exhibition of a vacuum tube, sent by Messrs. Zimmermann, by means of which an electric light may be utilised for the examination of the cavities of the body—as the throat, &c.

ON THE

SUBCUTANEOUS INJECTION OF MERCURY.

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(*Continued from page 654.*)

SOME months before M. Liégeois published the observations to which I have referred, Dr. Martin had proposed to substitute for the bichloride the biniodide of mercury and potassium, and had presented to the Society of Medicine of Paris, on Aug. 7th, 1868, an account of three patients in whom this double salt had been employed,* with, in one instance, most remarkable results as regards the secondary symptoms, and in all three very trifling local irritation. In the following year he published eight additional cases,† amongst which were six of secondary syphilis, dating from three to six months. These were cured after an average number of six injections. The pain of the operation was never very severe, and, after adding to each dose of two centigrammes half a centigramme of the hydrochlorate of morphia, became *nil*.

In the same year M. Bricheteau,‡ deprecating the irritant action of the bichloride, sought the advice of a distinguished chemist, M. Bouilhon, who accordingly made a number of experiments as to the solubility of various mercurial salts. At length he suggested the trial of a double iodide of mercury and sodium, for the preparation of which he gave minute directions.§ This combination was declared superior to the potassium salt from the fact of the salts of sodium having no action on the tissues. In recommending its adoption, M. Bricheteau states that he has only had an opportunity of trying its effect in two cases. In these there were no injurious local effects, and he was able to double the dose in a few days.

Langston Parker‖ mentions this solution as the one he was in the habit of using. "No treatment," he says, "is attended with less trouble either to patient or to surgeon, and I have seen it work one or two excellent cures where most other means had failed." He had seen abscesses, but thought they might always be avoided.

An inaugural thesis by Dr. Gelber, of Berlin, is alluded to by Dr. Walker,¶ of Peterborough, in which the kinate of mercury, in doses of one-sixth of a grain, is said to be the best form of administration. I have not met with any further mention of it.

I shall conclude this historical sketch by giving a brief outline of the plan proposed by Dr. Staub,** of Strasbourg, in 1872.

Liégeois, as we have seen, had already succeeded in avoiding local accidents by diminishing the dose. The investigations of Staub had for their object the discovery of some form of solution which, while ensuring an equal immunity, would yet permit the employment of ordinary doses, and so lessen the duration of treatment. There are, he says, two principal causes of irritation attending the subcutaneous injection of the sublimate: (1) the known acidity of the solution, and (2) the property it possesses of coagulating the albumen of the tissues. To obviate these inconveniences he proposes to adopt a modification of Mialhe's "normal solution of mercury," which is said to be a solution of the

* Gaz. des Hôp., Sept. 12th, 1868.

† Arch. Gén. de Méd., 6e sér., t. xiv., 1869, vol. 2, p. 305 *et seq.*

‡ Bull. de Thérap., t. 76, 7e liv., pp. 303-4; and Practitioner for March, 1869.

§ Ibid., pp. 315-16. The formula for the solution is as follows:—Double iodide of mercury and sodium, 1·50 grain; distilled water, 100 grains: dose, 10 drops. To prepare the salt: "On place dans une capsule de l'iodure de sodium avec quatre à cinq fois son poids d'eau distillée, on sature cette dissolution à l'ébullition par du bliodure de mercure; ce terme atteint, on ajoute à la liqueur environ vingt fois son poids d'eau distillée froide. Il se précipite du biiodure de mercure, et il reste en dissolution le composé, HgI NaI, puisqu'il est indécomposable par l'eau. On filtre ..... et on évapore la liqueur à siccité; le sel.....est immédiatement renfermé dans des flacons à l'émeri dont le goulot a été paraffiné."

‖ The Modern Treatment of Syphilis; 5th ed., p. 399 *et seq.*; Lond. 1871.

¶ Brit. Med. Journ., July 10th, 1869.

** Staub (C. E.): Traitement de la Syphilis par les Injections Hypodermiques de Sublimé à l'état de Solution Chloro-albumineuse, p. 109; Paris, 1872.

EXPERIMENTS WITH THE CHLORO-ALBUMINOUS SOLUTION OF STAUB.

No.	Name.	Age.	Bodily condition.	Secondary Symptoms.	Previous mercurial treatment.	Commencement of injection.	Day when gums first tender.	Discontinuance of injection.	Number of injections.	Strength of injection.	Quantity injected each time.	Total quantity of mercury injected.	Pain.	Induration.	Site of puncture.	Result on Constitutional Symptoms.
						1873.		1873.		Grains.		Grains.				1873.
1	Alice W.... ...	20	Stout	Roseola	...	Oct. 1st	5th	Oct. 5th	5	1-14th	15 min.	5-14ths	Little	Moderate ...	Right buttock	Oct. 7th, rash fading; 12th, disappeared; 18th, discharged cured.
2	Mary R.	19	Spare	„ 3 months	...	„	4th	„ 4th	4	„	„	2-7ths	None	Slight... ...	„	Oct. 11th, rash entirely disappeared; 18th, discharged cured.
3	Elizabeth L....	19	„	Lichen and condylomata, 4 months	...	„	6th	„ 7th	7	„	„	One-half	Slight	„	„	Oct. 9th, rash fading; condylomata disappeared; 18th, discharged cured.
4	Sarah F.... ...	19	„	Roseola, 2 months... ...	...	„	„	„ 6th	6	„	„	3-7ths	None	„	„	Oct. 12th, rash disappeared; 18th, discharged cured.
5	Mary W.... ...	30	„	Acne	7 days; no improvemnt.	„	„	„ 5th	5	„	„	5-14ths	Slight	Slight and ecchymosis	„	Oct. 10th, rash disappeared; 12th, discharged cured.
6	Louisa S. ...	18	Stout	Roseola (?)	10 days; no improvemnt.	„	5th	„ „	5	„	„	„	„	„	„	Oct. 10th, rash nearly disappeared; 20th, discharged cured.
7	Rose G.	18	„	Lichen and condylomata	...	„	9th	„ 8th	8	„	„	4-7ths	„	Slight... ...	„	Oct. 12th, rash disappeared; 18th, discharged cured.
8	Mary M.... ...	24	„	Roseola, 1 month	...	„	11th	„ 10th	10	„	„	5-7ths	„	„	„	Oct. 14th, rash disappeared; 20th, discharged cured.
9	Annie J.... ...	20	„	Roseola (?) 1 month ...	...	Oct. 4th	9th	„ 11th	8	1-9th	20 min.	5-9ths	None	„	„	Oct. 12th, rash disappeared; 22nd, discharged cured. (Detained for gonorrhœa.)
10	Sarah M... ...	28	Spare	Gummata of tongue; psoriasis	12 months irregularly	June 11th	10th	June 22nd	17	1-14th	15 min.	1 & 3-14ths	Very slight	„	Upper arm	June 21st, gummata disappeared, and rash nearly so.
11	Samuel D. ...	36	Stout	Iritis and psoriasis... ...	...	„ 16th	None	July 5th	19	„	„	1 & 2-7ths	None	Very slight	„	June 19th, scales falling; July 5th, eruption and iritis cured; condylomata appearing.
12	Margaret F....	25	Spare	Iritis and papular syphyllde	...	„ 28th	„	„ „	7	„	„	One-half	Very slight	„	„	July 5th, iritis and rash cured; iritis of other eye; cured in three days.
13	Annie B. ...	23	Well nourished.	Condylomata and rash (?) 2 weeks	...	Oct. 19th	3rd	Oct. 21st	3	1-7th	30 min.	Nearly a half	None	Slight... ...	Right buttock	Oct. 23rd, rash disappearing.
14	Margaret C....	30	Spare	Lichen	...	„ 13th	2nd	„ 14th	2	1-9th	20 min.	2-9ths	„	„	„	Oct. 15th, rash disappearing; 20th, discharged cured.
15	Mary E. W. ...	17	„	Condylomata and rash (?) 2 months	...	„ „	11th	„ 23rd	10	„	„	1 & 1-9th	„	„	„	Oct. 20th, rash disappearing; 24th, nearly well.
16	Harriet F. ...	18	„	None	...	„ 1st	9th	„ 8th	8	1-14th	15 min.	4-7ths	„	Slight with ecchymosis	„	
17	Mary S.	19	Well nourished.	„	...	„ „	8th	„ 10th	10	„	„	5-7ths	„	„ „	„	
18	Mary T.	19	Stout	„	...	„ 6th	7th	„ 12th	7	„	„	One-half	„	„ „	„	
19	Ann D.	21	„	„	...	„ 13th	6th	„ 18th	6	1-9th	20 min.	2-3rds	„	Very slight	„	
20	Ada D.	18	Spare	„	...	„ „	5th	„ 17th	5	„	„	5-9ths	„	Slight... ...	„	
21	Mary A. W. ...	18	Stout	„	...	„ „	„	„ 18th	6	„	„	2-3rds	„	Slight (more a month after)	„	
22	Mary A. S. ...	19	„	„	...	„ 14th	11th	„ 24th	11	„	„	1 & 2-9ths	„	Slight... ...	„	
23	Lucy M'D. ...	24	„	„	...	„ 13th	4th	„ 17th	5	„	„	5-9ths	„	Slight (more marked 3 wks. after)	„	

sublimate in that form of combination into which all mercurials enter before they act on the system.* It consists in adding to a simple solution of the bichloride in water small quantities of the chlorides of ammonium and sodium and the white of an egg.† This solution, Dr. Staub says, is free from acidity, and will not coagulate albumen. It will, therefore, pass directly into the circulation without the formation of a coagulum at the seat of injection; and the delay and irritation due to the process of re-dissolving will be avoided. Forty-four cases of constitutional syphilis are appended, in forty-two of which a cure was effected very rapidly. The average number of injections given to each patient was thirty-four, and the total quantity injected a little under two grains and a half. The pain of the operation he reports to have been trifling, and only occasionally was induration produced. In one patient, the subject of chronic alcoholism, there was some sloughing. Salivation occurred only five times, the gums were affected four times, and there was mild stomatitis three times. The author claims for his solution that it will not give rise to any irritation at the seat of puncture; neither inflammation, nor abscess, nor eschar. Subcutaneous indurations, Dr. Staub says, are very rare, and become absorbed in three or four days. He concludes by expressing his belief that this method is destined to take front rank in the therapeutics of syphilis.

Attracted by the brilliance of Staub's results, I obtained a supply of the solution prepared according to his formula,‡ and proceeded to test its effects for myself. In order to avoid burdening my paper with a mass of details, I have tabulated twenty-three cases in which it was employed. The greater number of the patients concerned, both in this and the subsequent series of experiments, were under the care of Mr. W. A. Patchett in the Magdalen wards of the Manchester Union Hospital, and a few were in-patients under Dr. Glascott at the Manchester Royal Eye Hospital. I desire to take this opportunity of gratefully acknowledging my indebtedness to both those gentlemen for the readiness with which they granted me every facility for my investigation, and lent me their personal assistance.

The usual dose employed was that recommended by Staub—namely, five milligrammes (one-fourteenth of a grain) of sublimate in a gramme (fifteen drops) of fluid. The injections were generally given every morning, either in the upper arm or in the gluteal region.

Fifteen of the cases were suffering from constitutional syphilis,§ and all these had some form of syphilitic eruption. In addition to the cutaneous syphilide, two of them had iritis, and one had gummous tumours, as large as an almond, situated in the substance of the back part of the tongue, which had been in a stationary condition for some months. In every instance the rash disappeared very quickly, the average time being eleven days. The cases of iritis were cured, one after seven and the other after eighteen injections, without any symptom of mercurialisation. The tumours of the tongue had entirely disappeared in ten days.

The cases were not under observation for a sufficient length of time to enable me to say anything about the liability to relapse. In two cases, however, fresh manifestations occurred while actually under treatment.

The average quantity of sublimate required to produce slight tenderness of the gums was about half a grain; and in one instance slight salivation was produced after injecting two-sevenths of a grain. The pain caused directly by the operation was in every instance inconsiderable. The punctures were *always* followed by a certain amount of induration, which had not become absorbed when the patients left the hospital. In one case that I saw three weeks after the last injection there was still a hard nodule at the seat of each puncture. Once or twice there was a little ecchymosis, but in no case either inflammation, abscess, or slough.*

(To be concluded.)

* Mialhe: Chimie appliquée à la Physiologie et à la Thérapeutique, p. 479; Paris, 1856.

† Bichlorure mercuriel, 1·25 gr.; chlorure ammonique, 1·25 gr.; chlorure sodique, 4·15 gr.; blanc d'œuf, No. 1; eau distil., 250 gr. Prepared by dissolving the salts in half the quantity of water and filtering; then dissolving the white of egg in the remainder of the water; and, lastly, mixing the two solutions and filtering a third time. "On le gardera dans un flacon bouché à l'émeri." A gramme of the solution contains 5 milligrammes (one-fourteenth of a grain) of the sublimate.

‡ The solutions used in this and all the subsequent experiments were carefully prepared by Mr. Benger, of Messrs. Mottershead and Co., Market-place, Manchester.

§ The remaining eight cases were admitted for venereal sores, and are included merely for the sake of noting the local effects of the treatment.

ON A FEW

ABNORMALITIES AND CERTAIN MORBID CONDITIONS MET WITH IN RECRUITS.

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No. III.

Redundance of Hair on the Body.

(*a*) "Male, aged twenty-one; profusion of black hair on head and face; very thick on chest and belly in front, and along the spine to the lumbar region behind, divided down the centre in both regions, and growing outwards; sparse on shoulders and buttocks; thick on extremities. On the forearms the hair runs towards the elbows; that on the thighs and legs in front runs downwards; on the calves it is growing inwards."

(*b*) "Aged eighteen, dark complexion; entire body, soles of feet and palms of hands excepted, covered uniformly with hair nearly a quarter of an inch in length; on the back it is parted to either side from the cervical to the sacral region; on the forearm it converges towards the elbow. Asserts that his father and three brothers are precisely similar."

(*c*) "Male, aged twenty-one; inordinate amount of hair on front of chest and abdomen. He has a tuft at the lower angle of the scapula on either side; that, however, on the right side is the largest. No exuberance elsewhere."

(*d*) "Long black hair on buttocks and back of thighs and legs, with marked absence in other situations, especially on chest in front and forearms. Hair not excessive on head and face. Two brothers similarly distinguished."

(*e*) "Long dark hair on inside of buttocks and on lower extremities. On the last it grows upwards and inwards on the thighs and calves behind, and downwards on front of thighs and legs. Other parts are peculiarly exempt. Father very hairy."

(*f*) "Profusion of long black hair along the linea albæ—excessive on the pubes, scarcely pronounced elsewhere. He has no whiskers; age twenty-one. Asserts father and all (two) brothers exactly like him."

(*g*) "Inordinately long black hair all over body, profuse on back and curling on legs. The hair on thighs in front growing downwards. States his father is precisely similar."

(*h*) "Aged fourteen. Hair dark, profuse, and long and curling down the spine; not apparent elsewhere."

(*i*) "There was an old woman I have seen frequently in the streets of Cork within the last four years, having her face almost covered with dark hair in the shape of moustache, beard, and whiskers."

(*j*) "Father and brothers hairy. All the body, excepting the hands, feet, and cheeks, covered with short black hair; that on back is diverging slightly from centre downwards; but in the middle of the back it is growing in a circle. The hair on forearms growing towards elbow. An oblong black mole, covered with long black hairs fully an inch in length, on inside of the left forearm. The circling of the hair on the centre of the back is like what is often seen in the lower animals."

As far as the testimony of the individuals is concerned, the condition was hereditary and sexual, as would naturally be the case, seeing that pronounced hairiness is almost confined to the male. The course of the hair everywhere was always in the same direction. It is to me unaccountable why the hair in certain instances should be very localised and profuse, and in other men diffuse, or almost entirely

* Mr. Patchett has very kindly furnished me with the duration of treatment in all the cases of constitutional syphilis admitted into the Magdalen wards from February to September, 1873, and submitted to ordinary mercurial treatment. The average was 37·3 days. In a precisely similar class of cases treated by subcutaneous injections the average duration of treatment was 16·6 days.

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absent, excepting in the usual regions, unless we believe that it was at one time the dermal covering of man; indeed, why are moles generally hairy?

Peculiar Locks of Hair.

(*a*) "A peculiar tuft of white hair on the back of the head. None of his parents or relatives are similarly distinguished."

(*b*) "A father and two sons had a grey forelock."

(*c*) "A mother and one son had each a tuft of white hair on the crown, but five brothers and sisters of the latter had nothing of the sort."

(*d*) "A lad, aged eighteen; hair, originally brown, at sixteen years of age commenced to turn grey, and at eighteen was *quite* grey. The first change took place in the hairs on the hind head, and rapidly spread all over. He had no illness, fright, or severe grief, and could not account for the change in any way. None of his parents and relatives had a tendency to become grey. Has twelve brothers and sisters."*

(*e*) A man, aged twenty-four; more than half grey-headed, the change taking place at sixteen years of age. His mother and nine brothers and sisters became prematurely grey before twenty.

(*f*) Aged twenty-five; white lock on the back of the head behind the left ear, bronze skin on trunk. His father, brother, and sister have a similar tuft in *exactly* the same situation.

Hair in Insane Persons.

I have been often led to inquire into the intelligence of recruits on account of the harsh and erect appearance of the hair, more especially if the countenance was in keeping with this "staring" condition of the hair on the scalp; indeed, I have notes of two cases found ineligible from decided mental imbecility, to which my attention was first directed by this well-known symptom, without which they might in all probability have been overlooked.

Abnormal Conditions of the Genital Organs.

The most numerous examples of deviation from the regular condition occurred with reference to the non-descent of the testes:—

(*a*) "Aged eighteen. Two fully developed testes on the left side connected together; right organ and a portion of scrotum wanting."

(*b*) "Two testes of normal size on left side, one on right side, also normal, in a very healthy youth of nineteen years of age."

(*c*) Reducible inguinal hernia (congenital) on left side, and no testis; organ normal on right.

(*d*) Scrotum entirely wanting, the raphe prominent, and one testis perceptible at left internal ring; penis fully developed, beard and whiskers, features soft, voice effeminate, and stature low, in two instances; ages eighteen and twenty-one; no relationship.

(*e*) Cord and epididymis only on right side; scrotum and left organ normal. Aged twenty.

(*f*) Six instances, from eighteen to twenty-four years of age, of remarkably large right testis, with no trace of the opposite organ and no appearance of septum.

(*g*) Atrophy of left testis; right not descended, but perceptible at internal ring. Aged eighteen.

(*h*) Scarcely any scrotum; left testis not larger than a filbert; no appearance of the right; penis normal; aspect peculiarly delicate and effeminate. Aged eighteen.

(*i*) Fully developed left testis, right not descended but perceptible in groin, scrotum and penis normal, in six instances, between eighteen and twenty-five years of age.

(*j*) The exact converse of *i*, in five youths between eighteen and twenty-three years of age.

(*k*) Great atrophy of all the genital organs; aged twenty-one; small stature; absence of beard, moustache, and whiskers; voice feeble and husky. A similar case, aged twenty-one, with less atrophy of testes, but almost total absence of scrotum.

(*l*) Right testis not larger than a buckshot, left retractile and rather smaller than usual; aged twenty-two; no hair on face. Another similar and rather less pronounced instance, aged eighteen.

It would seem that the inordinately enlarged single testis may be performing a double function, the other being entirely wanting, whereas in the cases where there is only one testis in the scrotum, but of normal dimensions, and no trace of the opposite organ, it might be surmised that both are functionally developed, although but one has descended. Delicacy and effeminacy of frame are not seemingly invariably concomitant in arrested development of the genital organs, although of frequent occurrence.

Inordinate Development of the Os Coccyx.

The normal aspect of the coccygeal bones in many thousand instances was only broken by three exceptions. One was a man who had a projecting coccyx of one inch and a half in length, curving inwards, but imbedded; another recruit had the member two inches in length and also curving inwards, and likewise not detached; both moved forwards when pressed upon. In the latter case it was very prominent, especially when the body was bent forward so as to make the hands touch the floor, when the os coccyx projected considerably, and, with the difference that it was not free, had all the appearance of a tail—so much so that the sergeant who regulated the man's movements, in accordance with the inspection, exclaimed, "Why, he has a tail." In the third case the coccyx was still more prominent, being about two inches in length, and ending in a truncated extremity; it was also not detached. I have read of one instance in a newspaper of an unnamed recruiting surgeon having rejected an applicant in consequence of the excessive development of the organ. The case is cited with such pointed reference to the long caudal appendage that, if accurately reported, it is indeed really remarkable. The transmission by inheritance of short tails in long-tailed mammals is well shown in the Manx cat. With reference to dogs, it may be remarked that I was shown by my friend Dr. Roche, of the Army Medical Department, a poodle destitute of a tail, procured by him in Cuba, where he assured me there was a race of that sort. The one in question had four litters, and exactly four puppies on each occasion, by an English poodle, when invariably there was one bitch born tailless like its mother, or rather with a mere stump, for there seemed to be a rudimentary organ in the parent. Here was sexual heredity.

Arrested Development of the Pectoral Muscles.

Two large, powerful, and otherwise well-formed men, had one the right, the other the left, pectoral muscles reduced to a few muscular bands stretching across to the arm just under the clavicles, the remainder of the space being occupied by skin and cellular tissue only, just as if the pectoralis major had been almost shaved off, thus showing a marked comparison with the opposite side. The defect in the right muscle did not affect the power of the extremity, and the individual was right-handed.

Woolner's Rudimentary Point of the Ear.

(*a*) A deformity in both organs to the extent that the concha was almost completely flattened, maintaining, however, a small niche in the inward rim, and the so-called projecting point, which is supposed by Mr. Darwin to be the rudiment of the pointed ear of the apes and lower mammals.* The latter tuberosity was especially prominent in the abnormalities in question; and a still more pronounced instance in an insane person has been shown to me by Dr. Langdon Down.

(*b*) "Left ear normal, right rudimentary only, a small portion of the upper portion being present. The meatus was impervious, yet apparently the inner ear was unaffected, as the hearing was not much impaired on the right side."

Position of the Ear in Deaf Persons; Absence of Lobes.

I noticed in many recruits, when there was a small amount of deafness, that the affected organ was always directed more forwards than the other. This was very evident when viewed in front, but whether a spontaneous effort, or merely caused by the individual constantly placing the hand behind the concha, did not appear. I have failed to elicit any voluntary movement in all such cases. The fact, however, must be familiar to aurists. In a family of two sons and two daughters, one of each sex, along with the mother, showed an absence of lobes to their ears.

* Mr. Darwin quotes other inherited instances. Animals and Plants under Domestication, vol. ii., p. 14. Also THE LANCET, p. 619, 1862.

* Descent of Man, vol. i., p. 22.

COPY AVAILABLE

A PROTECTIVE BANDAGE FOR THE EYE.

BY F. BULLER, M.R.C.S.,
HOUSE-SURGEON, ROYAL LONDON OPHTHALMIC HOSPITAL.

IN cases of gonorrhœal ophthalmia of one eye only, the first and most urgent duty of the medical attendant is to protect the other from contagion. For this purpose various devices have been proposed, but most of them, if not all, have been defective in one important particular—namely, the eye to be protected had also to be excluded; so that the unhappy patient, in addition to his other troubles, was condemned to grope in darkness throughout the duration of his distressing complaint. Under such circumstances very few persons will keep their hands away from the obnoxious appliance, and as a consequence the very means intended to secure safety become a source of danger.

The annexed woodcut represents a form of bandage I have found most useful in obviating the evils just mentioned. It consists of a square piece of macintosh into the centre

of which a watch-glass is fastened, and of three strips of adhesive plaster. The macintosh is trimmed to fit the nose and forehead of the patient, and should extend across one side of the forehead about half an inch above the eyebrow, and downwards nearly to the tip of the nose, the nasal portion reaching a little beyond the median line.

The adhesive plaster (emplastrum resinæ of the Pharmacopœia answers very well) is *spread thickly* on doe-skin; and a strip, about an inch in width, and long enough to reach from just in front of one ear to a corresponding point on the opposite side, is applied along the upper border of the shield. The second strip may vary in width according to the height of the nose, and must be snipped in three or four places, in order that it may be adapted to the uneven surface upon which it rests, the lower part only slightly overlapping the edge of the shield. For additional security, a third and somewhat shorter strip is placed along the dorsum of the nose. The eye is thus completely protected by a waterproof shield, the upper and inner sides of which are firmly adherent to the skin of the forehead and nose, whilst the lower and outer borders are free, so that the eye is exposed to the air almost as freely as when an ordinary shade is worn. Moreover, the surfaces of the watch-glass being parallel, vision is not interfered with, and the patient is able to attend to the affected eye.

As the strips of adhesive plaster become softened in the course of a few days by the warmth and secretion of the skin, they require to be renewed. This may be done as often as necessary without any difficulty or danger of infecting the healthy eye. I have used this bandage in gonorrhœal ophthalmia, and in several cases of inoculation for pannus of one cornea, where the other was clear and would almost inevitably have perished in event of becoming infected. In every instance the healthy eye has enjoyed a perfect immunity from the terrible malady of its fellow.

The glass does not become dimmed by an accumulation of moisture from the conjunctiva and skin of the face, as seems to have been the case with Snellen's closely-fitting glass shield;* nor does the protection afforded by the apparatus seem to be at all the less perfect in consequence of its outer and lower borders being free.

The shield may be obtained, at a small cost, from Messrs. Weiss and Co.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

THE HOSPITAL FOR WOMEN, SOHO SQUARE.

CASES OF OVARIOTOMY.

THE following is the commencement of a brief record of the cases of ovariotomy performed at the above-mentioned hospital during the year 1873. There were 12 cases, with 5 deaths, giving an average mortality of 41·6 per cent. From 1865 to the end of last year 71 ovariotomies have been performed at this hospital, with 27 fatal cases, or an average mortality of 38 per cent. For the following notes we are indebted to Dr. Squarey.

CASE 1. *Multilocular cyst; recovery.*—Caroline C——, aged thirty-eight, single, was admitted, under the care of Dr. Meadows, on Jan. 11th, 1873. Patient noticed the abdomen enlarging for about a year past, but it has rapidly increased during the last three months. In the last month her feet became swollen after over-exertion, and she suffered from constant pain in the back. Catamenia always regular; menstruation natural and without pain.

On admission the abdomen was tense, shining, and red; fluctuation very distinct everywhere; dull all over, except in epigastrium and flanks. On deep inspiration the abdominal walls seemed to move over the tumour. There was a good deal of pain and tenderness on the right side. The girth at the umbilicus was thirty-five inches. Per vaginam: the uterus was situated rather posteriorly by the tumour, which could be felt filling up the pelvic brim and projecting into the cavity a little, and having all the characters described above; very tense, elastic, and fluctuating.

Operation, by Dr. Meadows (Jan. 25th). — The cyst was multilocular, and contained thirteen pints of thick, dark-brown, grumous fluid; there were no adhesions. The pedicle was clamped and the mass cut away. The clamp was screwed tight and left for ten minutes, but on slackening it the pedicle bled freely, so it was transfixed with a needle and securely tied with whipcord. The abdomen was then mopped out and the pedicle returned. The wound was closed with deep silk ligatures, dressed with carbolised oil, and supported with broad strips of plaster, an abdominal belt being placed over all.

The patient suffered much from sickness the first three days, after which she did well. The stitches were removed on the seventh day, but the healing of the wound was delayed by a small abscess which formed along the line of one of the stitches. On Feb. 24th she was discharged cured (the thirtieth day after the operation).

CASE 2. *Suppurating cyst of left ovary; operation; death on third day.*—Jane H——, aged fifty-two, married twenty-eight years, had one child twenty-seven years ago, admitted, under Dr. Heywood Smith, Jan. 6th, 1873. Two years ago

* See Stellwag von Carion, American Translation, 1867, p. 309.

she was seized with violent abdominal pain, when the doctor who attended found a swelling in the right inguinal region. Since then the swelling increased, specially so during the last six months. In December, 1872, she was tapped, and since then she has become weak, lost flesh, and cannot walk. Catamenia regular up till two or three years ago, but since then they have been scanty, and ceased entirely eight months ago. Previous to present ailment the patient was a healthy woman.

On admission, the patient was emaciated; appetite bad; urine loaded with lithates, no albumen; abdomen distended up to ensiform cartilage, dull all over except in epigastric and both lumbar regions; swelling soft and fluctuating distinctly; some tenderness generally over abdomen. Pulse varying from 108 to 112; temperature from 98° to 99·8°; girth at umbilicus 37 in.

On Jan. 11th, Dr. H. Smith tapped her, and drew off eighteen pints of horribly offensive purulent fluid, and for some days after she was easier, and improved generally. The fluid, however, rapidly reaccumulated, the abdomen became very tender, her temperature rose to 101° and her pulse to 120 on the 20th. On the 29th her condition was better, and ovariotomy was agreed on, and was accordingly done on the 1st of February. The cyst was unilocular, connected with the left ovary, and contained ten pints of very offensive pus. There was a band of adhesion between the pelvic brim and the cyst. The pedicle, about the size of the finger, was clamped and divided with the actual cautery; the band of adhesions was treated in a similar way, and both dropped into the abdomen. The abdominal cavity was then well sponged out, the wound brought together with deep carbolised silk sutures, dressed with Lister's oil-silk and lac plaster, and supported with broad strips of plaster, an abdominal belt placed over all. The patient rallied fairly from the operation; though sick at times, she was able to take some nourishment, but sank and died exhausted on the third day.

At the post-mortem examination the pedicle was found free from any inflammatory action, as also the whole abdomen. The right ovary consisted of a cyst about the size of a small orange. Uterus normal.

CASE 3. *Colloid degeneration of left ovary; ascites; peritonitis; death on the third day.*—Emma S——, aged fifty, married twenty-six years, was admitted March 24th, under the care of Dr. Meadows. Has had twelve children (the last six years ago) and three miscarriages. Catamenia ceased two months ago, previously had been irregular. First noticed the abdomen was enlarged sixteen months ago, when there was a swelling on the left side about the size of an orange. Has gradually increased since, very much more rapidly during the last two months, and during that time has suffered from attacks of severe abdominal pain, and lost flesh.

On admission the patient was very thin, and greatly distressed by the abdominal distension. Urine deposited urates on cooling, but contained no albumen. Abdomen greatly enlarged, veins distended and prominent; shape ovoid, and largest below. All over upper part of swelling, from two inches above umbilicus and upwards, there was tympanites. Resonance in both flanks, more so on right, dull everywhere else. Some distinct fluctuation could be made out superficially, distinct from the tumour, and evidently ascitic. Per vaginam: the whole posterior wall of the vagina with the rectum was protruded, on replacing which the uterus was found in normal situation, and apparently of normal size. The uterine sound passes in normal direction. No trace of the tumour can be felt. Girth at umbilicus 39½ inches.

On March 29th ovariotomy was performed. On opening into the peritoneum eight pints of ascitic fluid were evacuated. The tumour was then reached, and found to be a semi-solid tumour of the left ovary. As the trocar failed to evacuate any of its contents, an incision was made into it, and its contents partially evacuated, after which the whole mass was got out of the abdominal cavity. Some omental adhesions were torn through, and one or two bleeding points tied with silk. The pedicle was then clamped, and divided with the actual cautery. On removing the clamp a vessel still bled, requiring a ligature. The abdomen was then well mopped out, the wound brought together with deep silk sutures, dressed with lint dipped in carbolic oil, covered with oiled silk, and supported with broad strips of plaster, an abdominal belt over all.

The tumour weighed 11 lb., was dense, and on section presented a series of transparent, glistening cells, from the size of a pin's head to that of a large pea, containing thick gelatinous contents. At margins of tumour were several cysts varying from the size of a walnut to that of a cocoanut, containing the same material. The intestinal peritoneum was congested and somewhat granular.

The patient, although suffering a good deal from sickness, did well till the morning of the third day, when the abdomen became greatly distended, and she sank and died the same evening.

At the post-mortem examination the uterus and pelvic organs generally were more or less covered with recent lymph. The pedicle was free from inflammatory action. The intestines were greatly distended and matted together. Lymph was found scattered all over, especially in the locality of incision. The wound was only partially united.

UNIVERSITY COLLEGE HOSPITAL.

TRAUMATIC STRICTURE; FORCIBLE DILATATION.

(Under the care of Mr. HEATH.)

THE following is one of the series of urethral stricture cases commenced on p. 619.

William C——, a gardener's assistant, aged fifteen, was admitted Jan. 30th, 1874, with traumatic stricture of the urethra. Some months before the present admission the patient suffered a lacerated wound of the perineum by falling on to some iron railings. He was admitted into this hospital the day after the accident, under the care of Mr. Marshall, who succeeded in passing a catheter, which was tied in. Some days after this there occurred secondary hæmorrhage, which was arrested by applying a ligature to the bleeding vessel in the perineum. To accomplish this it was necessary to open up the perineal wound, and in doing so an extensive laceration of the perineum was discovered. After this catheters were passed occasionally, but the boy became anæmic, suffered occasional renal pains, and had a considerable elevation of temperature. He subsequently left the hospital with a small fistula in the perineum, but some weeks after he returned with high temperature and renal pains. Since leaving the hospital on the first occasion he had prevented the urine passing through the perineum by squeezing the perineum during micturition. On some occasions, however, he was compelled to allow urine to come through the fistula, as otherwise he was unable to pass water.

On Jan. 24th and 25th the boy again suffered severe renal pain, which was more intense and lasted longer than on any previous occasion. On the morning of admission (Jan. 30th) the patient passed a little urine about 4 A.M., but on getting out of bed later on, he was unable to micturate, and could not even force the water through the fistula. At noon the bladder was aspirated, after failure at catheterism. Subsequently, on the same day, Mr. Heath, who then saw the patient for the first time, succeeded in getting a No. 4 catheter into the bladder when the patient was under the influence of chloroform. Urine acid; trace of albumen; sp. gr. 1020.

Jan. 31st.—No. 6 catheter passed with tolerable ease, but the patient suffered great pain.

Feb. 2nd.—Urine passes freely per urethram.

5th.—The boy was put under chloroform, and Mr. Heath, on finding the calibre of the urethra to be No. 8, passed Holt's dilator, and split up the stricture to this size.

9th.—No ill effects of any kind followed the operation. To-day No. 7 catheter was passed with ease. The boy did not complain of pain during the passage of the instrument.

10th.—Patient discharged with stricture dilated up to No. 7.

ROYAL INFIRMARY, LIVERPOOL.

TWO CASES OF INTESTINAL OBSTRUCTION; DEATH.

(Under the care of Dr. GLYNN.)

FOR the following notes we are indebted to Mr. Herbert A. Lawton, house-surgeon.

S. H——, aged seventeen, a boy on board the training-ship *Akbar*, was admitted on December 2nd, 1873, suffering from vomiting and constipation. The following history was obtained on admission:—

A year and nine months prior to admission he suffered from a similar attack, constipation and vomiting, with pain in the abdomen, being the prominent symptoms. With this exception he had always had good health.

Some two months ago he began to experience pain and tenderness over the abdomen. The pain continued at intervals until November 28th, when it suddenly became more severe, and has continued and increased up to the present. Until November 28th the bowels acted daily, but since that date neither purgatives nor enemata have succeeded in relieving him. The abdomen has increased in size, and attempts to stool have been accompanied with great straining. Vomiting commenced on Nov. 29th, and has continued.

On admission the patient was very thin, the eyes sunken, face anxious and expressive of pain; lay on side with knees drawn up; tongue dry and furred; abdomen was distended, and coils of loaded intestine could be both seen and felt in central parts of abdomen; pressure gave him a good deal of pain, and there was dulness over the whole of the abdomen except in the right flank; no tumour could be made out. Had a cough, with slight expectoration; very thirsty; vomited continually, and especially after taking any nourishment; bowels not acted. Ordered milk, ice, beef-tea, soda-water, four ounces of brandy, a quarter of a grain of extract of belladonna every four hours; hot fomentations.

Dec. 3rd.—Had a bad night; slept but little, and was in much pain; vomiting stercoraceous; bowels acted at 6 A.M. and 8.30 A.M.; the fæces were of a brown colour, and of the size of the little finger; tongue brown, slightly moist; still thirsty. Pulse 120, weak and small; abdomen not so tender on pressure, and feels slightly softer. To continue treatment and diet.

4th.—Passed a very restless night; vomiting persistent and frequent; ejected matter in appearance very much like a typhoid stool; bowels acted twice since yesterday morning, a very little fæcal matter, the same in character as yesterday, being passed each time; strains very much at stool, and becomes faint. To take the pills every three hours, and to continue diet. At night-time an injection of a pint of warm linseed oil was given; this remained up for half an hour, and returned almost as thrown up.

5th.—During yesterday and the night he continued to vomit the same typhoid-looking matter. The desire to stool became very frequent, but nothing passed; and, becoming exhausted, he gradually sank and died at 9 A.M.

Autopsy, twenty-eight hours after death.—Body much emaciated, and rigor mortis persistent. Lungs congested and emphysematous, and pouring out frothy fluid. No tubercle present. Heart healthy, but containing an ante-mortem clot. In abdomen peritonitis, both old and recent, was present; peritoneal surface of intestines injected; intestines adherent; on separating them, close down by prominence of sacrum, and at a distance of about three inches from ileo-colic valve, a knuckle of intestine was encircled by a band of fibrin, which constricted it like an elastic band; constricted portion of a dark-claret colour. Liver slightly fatty. Kidneys pale; capsule readily torn off; medulla slightly fatty.

CASE 2.—R. S——, aged sixty-two, cellarman, residing in Liverpool, was admitted into the infirmary on Feb. 27th, 1874, complaining of constipation. The patient was in good health until 3 A.M. on the morning of Feb. 23rd, when he was suddenly seized with a violent pain in the left hypochondriac region, accompanied with a desire to stool. The bowels were shortly afterwards slightly relieved. He went to work as usual in the morning, but at midday he left off on account of pain and a foreboding that he was seriously ill. He remained quiet at home until the 27th. During this time he took various purgatives without relief, vomiting only once (a black draught). The pain increased, and the abdomen began and continued to swell. He slept well.

On admission patient was a well-built, muscular man, ruddy in countenance, in fair spirits, but the face had a slightly anxious look; abdomen swollen and tympanitic; fulness most marked in direction of ascending and transverse colon; no pain on slight pressure; complained of a dull, aching, continuous pain, chiefly in the region of splenic flexure of colon; tongue dry; no vomiting; legs not drawn up. Ordered one drop of croton oil, and ten grains of colocynth and hyoscyamus in pill; beef-tea, milk, two eggs, and three ounces of brandy.

Feb. 28th.—In the same condition; pills have not relieved the bowels; abdominal pain no worse; no vomiting; slept well; tongue dry; temperature normal. Ordered a quarter of a grain of extract of belladonna every three hours; belladonna ointment to be rubbed in over abdomen; hot fomentations; continue diet and arrowroot. At 10 P.M. an enema of warm linseed oil was thrown up by means of a long tube; remained up about an hour, and returned as thrown up.

March 1st.—Passed a good night. Is getting thinner and more anxious in expression, but does not complain of increased pain; no vomiting. Ordered one-third of a grain of extract of belladonna every three hours.—10 P.M.: Belladonna having produced a physiological effect, it was ordered to be discontinued. Galvanism by means of Stöhrer's battery applied for forty-nine minutes, as follows:—A full-sized gum-elastic catheter, with three large eyelets, armed with a stylet, was passed well up the rectum; the stylet was connected with one pole of the battery, and the other pole, connected with a sponge, was passed over the surface of the abdomen. When applied over the region of the splenic flexure it gave him considerable pain. Flatus passed during and after the galvanism.

2nd.—Slept badly; talked a great deal during sleep; lies on the back and is listless, when roused he becomes talkative and wanders; countenance anxious and drawn; says he has no pain; no vomiting; pulse weak and compressible, 92; temperature 99° F.; tongue dry and cracked; bowels still confined. To return to one-third of a grain of the extract of belladonna every three hours, and four ounces of brandy. 10 P.M.: Abdomen more distended. A fine aspirator needle passed into distended intestines, and flatus let off, which relieved him slightly. Temperature, at 10.30, 98·5°.—12.30 P.M.: Is much worse, very restless, and has delusions.

3rd.—8 A.M.: Had a very bad night, getting out of bed; mutters incoherently.—9 A.M.: In articulo mortis; died about 9.30.

Autopsy, eight hours after death.—Abdomen only examined, as the friends wanted to remove him at once. Intestines much distended with flatus and fæces; surface injected; a few ounces of clear, straw-coloured fluid flowed out. The epigastrium and left hypochondrium were occupied by the cæcum, which had slipped through the mesentery, and which was very much distended and had the appearance of an inverted distended stomach. The pedicle, which consisted of ileum and hepatic flexure of colon, was encircled by a coil of small intestine, this stricture being just to the left of the spinal column. On uncoiling the small intestine, the constricting band was found to pass from below upwards from right to left, and then downwards from left to right. Colon beyond constriction empty, and ileum before constriction filled with fæcal matter. No remains of needle punctures.

Remarks by Dr. GLYNN.—In the case of the boy it was difficult to decide as to what was the course of events. When was the fibrous bridle formed? It was probably inflammatory product in the same manner as the adhesions in its neighbourhood. There was no history of any illness except two years before admission; he may, however, have had enteritis with peritonitis when a child. The attack of constipation and vomiting from which he suffered at that time may have been due to some such affection, and the band may have been formed then. It could not possibly be stated how long the intestine had been confined by this bridle. Formed across it, it may have existed for some time, the attack of constipation two years ago being produced by a temporary accumulation of intestinal contents at the narrowed spot. As time passed the band would shorten, compressing the intestine more, the surrounding peritonitic adhesions crippling the peristaltic action of the intestines, and increasing the risk of obstruction. This view appeared more probable than that the intestine in the former attack had slipped beneath the band, disengaged itself, and again become more firmly embraced by it; for when intestine becomes strangulated in such a way any tendency to liberate itself is much hindered by the distension of the strangulated part from impaired nutrition and paralysis of its wall. The history of the abdominal pain several weeks before the last attack and the appearance of the parts also supported this view.

The man, strangely enough, was attacked with symptoms of obstruction while resting in bed. The previous day was

a Sunday, and he had remained quietly at home all day, and his bowels had acted. On examination, in the case of the boy, it was the central part of the abdomen that was fullest; in that of the man, the epigastric and left hypochondriac regions. The tympanites in the man's case was excessive, and much more marked than in the boy's. The absence of vomiting in the man's case was not due to the position of the obstruction, but rather to the rapid distension of the intestines with cessation of vermicular action consequent on weakness of the muscular coats from age.

It was remarkable that in both cases the temperature did not indicate the peritonitis that existed. The temperature of the boy was only taken twice, and was but little above normal. The man's temperature was taken repeatedly, and ranged only from 98° F. to 99° F. As in all cases of obstruction, the histories in these cases furnished important data on which to found a diagnosis as to the nature of the obstruction, while the examination helped us to form an opinion as to its seat, the small intestines being distended in one case, and the large in the other.

The intestines are necessarily usually distended above the seat of obstruction, and collapsed below it. However, this is not uniformly the case, as sometimes the intestines may become dilated with gas below the obstruction, when a fatal termination approaches. Such dilatation had occurred in a patient under Dr. Glynn's care a short time previously. The case was one of cancer of the stomach completely obstructing the pylorus. On admission the abdomen was flat or hollow, the anterior wall resting on the vertebræ, the intestines being collapsed. A few days before death the abdomen became extremely distended from the opposite condition of intestines, arising no doubt from paralysis of the muscular coat—a view supported by the fact that paralysis of the bladder occurred at the same time.

In the case of the man the extraordinary development of the cæcum caused much difficulty in diagnosis. The prominence caused by it occupied the position of the transverse colon, yet there was no obstruction at the sigmoid flexure to cause its distension, as the long tube could be introduced readily, and a large quantity of fluid injected.

A purgative was given to the man on admission to satisfy oneself as to the extent of the obstruction, and the treatment of belladonna was supplemented by faradisation and puncture. As, however, was evident by the post-mortem examination, nothing short of manual interference could have restored the patency of the intestinal canal.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 28TH, 1874.

DR. C. J. B. WILLIAMS, F.R.S., PRESIDENT, IN THE CHAIR.

A CONTRIBUTION TO THE NATURAL HISTORY OF PULMONARY CONSUMPTION, CONSISTING OF AN ANALYSIS OF 100 MALE CASES OF HÆMOPTYSIS.

BY HORACE DOBELL, M.D.,
SENIOR PHYSICIAN TO THE ROYAL HOSPITAL FOR DISEASES OF THE CHEST.

THE paper was based upon an analysis of 100 cases of hæmoptysis in males, recorded on a plan of inquiry so designed that it should as far as possible avoid the chance of prejudice from preconceived opinions and impressions, and include all the facts essential to the inquiry in a tabular form.

The author considered that the 100 cases represented an average succession of more than 600 cases, in consequence of the rigorous system of rejections adopted in collecting them; at the same time that they formed a fairer basis for statistics than if no selections had been made, because incomplete and unreliable reports were excluded. The plan adopted was fully detailed. Eighteen tables were given.

In the principal table was shown "the relation between loss of weight, cough, hæmoptysis, and lung disease in 100 male cases of hæmoptysis tabulated under seventy-four headings;" each line in the horizontal direction representing a complete case, and each column giving the answer "yes" or "no" to the question at its head.

The primary object of the investigation was to assist by clinical observation in settling the important question of the true position of hæmoptysis in the natural history of pulmonary consumption. But it had been necessary to this end that a number of circumstances connected with each case should be recorded, and these may form a basis for many other inquiries than time had allowed to be worked out in this paper. The author had therefore made it an especial object in arranging and tabulating the facts to place them in such a form that others might work from them as well as himself. A digest of the contents of Table 1 was given, showing the results obtained by each column, and comparing one with another.

In a statistical point of view Dr. Dobell considered that, notwithstanding the plan of rejections adopted, one hundred cases was too small a number to form the basis of final conclusions; he therefore wished them to be regarded as only a contribution to the subject, and hoped that others with more time at their disposal would follow up and supplement his contribution with more cases similarly analysed, until the number was sufficiently large.

The author observed that he had studiously avoided entering upon questions of pathological histology, his object being to keep as strictly as possible to a simple analysis of the clinical facts presented by the cases. He pointed out that the cases, when tabulated, arranged themselves naturally into groups; first into three large clinical groups characterised by the relation in point of time between the first hæmoptysis and the first loss of weight; into three other groups characterised by the relation in point of time between the onset of first cough and the occurrence of first hæmoptysis; and again into two other groups characterised by the relation in point of time between the onset of first cough and the occurrence of first loss of weight; and others not enumerated.

These natural groups formed the basis of some of the supplementary tables, of which there were seventeen. The first of these (Table 2) was an analysis of the conditions of the lungs in the 100 cases. Table 3: an analysis of 12 cases in which first cough began at the same time as first hæmoptysis. Table 4: an analysis of 8 cases in which first hæmoptysis occurred before first loss of weight. Table 5: an analysis of 10 cases in which first hæmoptysis and first loss of weight occurred at the same time. Table 6: an analysis of 82 cases in which first hæmoptysis occurred after first loss of weight. Table 7: a comparative analysis of Tables 4, 5, and 6. Table 8 gave the total loss of weight and the rate of loss per annum in the three groups of cases analysed in Tables 4, 5, and 6. Table 9 showed the loss of weight, the time in which it had occurred, and the rate of loss at different stages of lung disease. Tables 10 to 18 analysed the cases grouped under different stages of lung disease.

Details were given of the cases in some of the most interesting of the clinical groups, and commentaries offered upon them, in which the meaning of the hæmoptysis in each case was especially considered.

Dr. THEODORE WILLIAMS said a number of topics had been brought forward in reference to hæmoptysis. The chief point attempted to be established was, that loss of weight always preceded hæmoptysis; but the author must remember that in order to ensure his cases being those of undoubted phthisis, he had eliminated all cases of hæmoptysis unaccompanied by loss of weight, thereby making sure of his conclusion beforehand. A reference to the fortnightly weighings of the Brompton Hospital would easily determine this point. Dr. Williams could call to mind several instances in which hæmoptysis was not followed by loss of weight. He had noticed patients gain flesh to a large extent after large hæmoptysis. The causes alleged by patients for hæmoptysis were diverse and too frivolous to give much information, and should not be too much relied upon. The true causes must be sought for in the pathology, and not in the clinical history of the disease. When cavities existed, the hæmorrhage could generally be traced to the bursting of an aneurismal dilatation of a branch of the pulmonary artery. The hæmoptysis of the second stage could be explained in a similar way, the vessels being laid bare and occasionally penetrated by the ulcerating process. The hæmorrhage of the first stage had been accounted for by a fragile state of the arteries arising either (1) from fatty degeneration, (2) from atheromatous changes. Recently

Dr. Rasmussar had assigned minute aneurisms of the branches of the pulmonary artery as a cause. Hæmoptysis prevailed to a greater extent among males than females—63 per cent. of males to about 37 per cent. of females; if the hæmorrhage was profuse, about 35 per cent. of the former to 18 per cent. of the latter. He wished to draw attention to another form of "hæmorrhagic" phthisis, which had been recognised by Dr. C. J. B. Williams and Dr. Peacock. It was marked by copious hæmoptysis and very slight physical signs. The general health was at first good, but the after progress proved the cases to be phthisis.

Dr. SYMES THOMPSON thought that if the paper had contained more pathological details many would have been ready to debate, but these had been avoided generally. Two or three points had been illustrated by a case or two. It appeared that if the cases of hæmoptysis were grouped together, and compared with those in which there was no hæmoptysis, the duration of life was greater in those with hæmoptysis. In cases of hæmoptysis there was not unfrequently an improvement in weight, the breathing being freer and the digestion improved, and thus the weight was increased.

The PRESIDENT thought the subject was full of interest; hæmorrhage was usually preceded by symptoms of ill-health, cough or morning expectoration. It might come on without these symptoms having preceded it, but always some previous pathological change. He thought the earliest sign of phthisis was some change in the lymphatic system, and a swelling of the glands. He did not think hæmoptysis ever took place in a healthy lung; there was always some cause of fragility in the lung to produce it.

Dr. DOBELL was glad to hear that the President agreed with the statement that there was some constitutional symptom before hæmoptysis. He had drawn attention in the paper to the loss of weight before hæmoptysis, and not to that which is met with afterwards. With regard to the quantity of blood spat, he had taken the cases where there was always more than streaks of blood in the sputa, not less than half a drachm.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 13TH, 1874.

MR. VICTOR DE MÉRIC, F.R.C.S., PRESIDENT, IN THE CHAIR.

PROFESSOR ERASMUS WILSON, F.R.S., exhibited a specimen of Gurjun Oil or Balsam, and he stated that this material, which was also called "wood oil," was an oleo-resin obtained from several species of the Dipten carpus, an immense tree growing on the Malayan coast of the Bay of Bengal, where it was so common as to be used instead of paint for houses and ships. About twenty years ago this oil was introduced into England as a substitute for copaiba balsam, and was reported to have the same medical properties. Opinion was, however, divided on this point, and the gurjun oil did not succeed in securing a place in the Pharmacopœia. In March, 1873, Dr. Dougall, of the Indian medical service, took charge of the convict establishment of the Andaman Islands, where he found twenty-four of the prisoners suffering from leprosy. He resolved upon employing the gurjun oil both as an internal and external remedy, and determined upon giving it a six months' trial. He closed the experiment in November by a report, which was kindly placed in Mr. Wilson's hands by Sir Ranald Martin, and used in his lectures before the College of Surgeons. Dr. Dougall's method was to have the patients washed thoroughly in a neighbouring stream, using dry earth instead of soap. They were then made to rub themselves for two hours with a liniment composed of gurjun oil and lime-water, one part to three, and to swallow two drachms of the balsam, also combined with lime-water. After this they had their breakfast, and were set to any work they were capable of doing. In the evening the same process was repeated, except the washing. The effects of this treatment at the end of six months were marvellous. Neuralgic pains were allayed, sensibility was restored to the anæsthetic skin, tubercles subsided, and ulcers healed. Dr. Dougall was astonished with the energy of these formerly helpless ones. Mr. Erasmus Wilson remarked that he had used a liniment composed of equal parts of the gurjun oil and lime-water in cases of painful eczema, in lupus, and in cancer, with very encouraging results; and stated that Mr. Hancock had applied it in a case of cancer of the skin with the effect of dispersing tubercles and healing ulceration; but its most useful property was that of relieving pain. Mr. Wilson suggested that this very simple remedy deserved a trial at the hands of the profession, and believed that it would be found a valuable agent of cure in many affections where the skin was painfully attacked. Mr. Wilson exhibited photographs of Dr. Dougall's patients before and after the treatment, and also capsules of the oil for internal treatment, which could be obtained at the principal chemists.

Dr. FAYRER stated that gurjun oil was an old remedy for various complaints, but he heard of its use for the first time in treating leprosy. He had found the oil useful in dysentery, in genito-urinary affections, and in healing up old ulcers. Though cautious about accepting accounts of cures in India, he could not resist the evidence of Dr. Dougall, to whose careful investigation of the drug he paid a high tribute. He thought perhaps the improvement in the health of the patients was owing to the constant and careful cleansing, and more to the internal than the external use of the drug.

Mr. WILSON (in reply to Dr. Rogers) said he had procured his first specimen from Messrs. Allen and Hanbury; those shown were from Messrs. Bell and Co.

Mr. FRANCIS MASON exhibited a man, aged twenty-seven, who had been under his observation at St. Thomas's Hospital with a Syphilitic Infecting Sore on the middle of the front of the right thigh. It had existed for one month, commencing in an abrasion of which little notice had been taken. The patient stated that he had had intercourse two months previously, but since then had not placed himself in the position of getting a sore of any kind. At his first visit on March 19th, Mr. Mason drew attention to the characteristic appearance, and the complete history of the sore. The man was told to watch for any spots that might appear. A water dressing was ordered, and placebo medical treatment. In a week he returned to the hospital with a well-marked rubeoloid eruption over the abdomen. There was no sore on any other part of the body, and Mr. Mason concluded that the case was one of true syphilitic infection, or indurated sore, followed, as such cases usually are, by constitutional symptoms. The patient was now taking the perchloride of mercury in doses of one-twelfth of a grain.

Mr. HENRY LEE said the case required a clear antecedent history, and he remarked that, as far as the sore itself was concerned, it might be a secondary one, for he agreed with Ricord, that in appearance it was impossible to distinguish a secondary from a primary sore. He thought that if Mr. Mason went more fully into the case, some history of a primary infection might be elicited.

Mr. ACTON considered it might be a primary sore arising from the infection of an abraded surface. This often took place where a finger has been scratched. In this case the thigh had been scratched.

The PRESIDENT asked Mr. Mason whether, to make matters certain, he had inoculated the patient, and, drawing attention to the different opinions of Mr. Acton and Mr. Lee, inclined to the view that the sore was primary.

Mr. HENRY LEE interposed that he did not say the sore was secondary, but that the history of the case was wanting to show that it was not so.

Mr. GAY observed that the early occurrence of the skin eruption pointed to the sore being primary.

Mr. MASON briefly replied, and brought forward a man aged forty-eight who had three varieties of hernia, umbilical, femoral, and oblique inguinal. He wore trusses, and only complained of a dragging sensation in the abdomen.

DEATH FROM CHLOROFORM.

Mr. KEENE stated that he had given notice of a case of death resulting from the administration of the bichloride of methylene, but he had submitted a specimen of the anæsthetic used to Dr. Richardson, who had informed him that it was chloroform, and did contain a particle of bichloride of methylene. He would, therefore, change the title of his paper to "Death from Chloroform." A woman aged fifty was admitted into the Central London Ophthalmic Hospital, under Mr. Wilkinson's care, for double glaucoma. On the same day, after the administration of what was believed to be methylene bichloride, iridectomy was performed on the

right eye, followed by considerable improvement. A week later it was intended to operate on the left eye. The anæsthetic was administered from the same bottle as before. The patient was nervous and timid, and held her breath at first. After a little encouragement and allowing her to become accustomed to the anæsthetic without forcing, she breathed more freely, and sixty minims were added to the forty already given in the inhaler. In a short time she stiffened herself, drew back her head, and remained for a few seconds in a state of general rigidity. The breathing became stertorous, hurried, and uneasy, and the inhaler was removed, the respiration being carefully watched for half a minute, during which time she endeavoured to eject saliva. She drew a deep inspiration, and ceased to breathe. The pulse stopped, and in spite of the use of the wet towel, of ammonia to the nostrils, and artificial respiration on Silvester's method, no reaction, with the exception of one or two efforts at breathing, took place. The treatment was kept up for ten minutes, but the woman was quite dead. There was nothing in her appearance before the operation which would warrant any apprehension of danger. Mr. Keene then gave an account of the post-mortem examination, the principal features of which were that the anterior surface of the heart was loaded with fat, that the posterior wall of the right ventricle was very thin, the muscle being here apparently encroached on by fat, but there was no fatty degeneration to be detected under the microscope. The acrta was dilated and rigid with atheromatous deposit; the right auricle was distended with almost fluid blood, the valves being healthy. The author remarked that the case suggested the following points for consideration:—(1) The preliminary stage for anæsthesia; (2) the selection of the anæsthetic; (3) the method of administration; (4) the best means to adopt when dangerous symptoms arose. On the first, he objected to the practice of causing the patient to abstain from the last meal, which being dinner, practically came to keeping him twenty-four hours without substantial food. He advocated a more substantial breakfast and strong beef-tea later, and in case of a patient exhibiting great fear, small doses of brandy might be given. Morphia and bromide of potassium, to lessen reflex irritability before the anæsthetic was administered, had been suggested, but he had not tried this plan. On the second point he would request the opinion of the Society. It was the fashion to consider ether safer than chloroform or the methylene bichloride, but it seemed to him that six or seven deaths having occurred in the short period when ether was first employed, and the occurrence of a fatal case lately, were not entirely favourable to its use. On the third point there was a variety of practices, and he advised giving the anæsthetic slowly, and humouring resistance on the part of the patient rather than overcoming it by opposition. On the fourth point it might be objected that galvanism should have been employed, but Mr. Keene thought that it was more likely to lower the heart's action than to increase it, and the only means to be employed were drawing out the tongue and practising artificial respiration. He would venture to ask for a full discussion from the fellows on this important subject.

The PRESIDENT asked how it was that chloroform was given for the bichloride of methylene? Was it the manufacturer's fault?

Mr. GEORGE COWELL had had a case of death from chloroform in which, at the autopsy, the right ventricle had been found dilated and the fibres undergoing fatty degeneration. He regarded fear as a bad sign. After-treatment was of no use. If the heart stops, nothing will excite it to contraction, but if the breathing became weak, artificial respiration might be of great use.

Dr. SUTRO suggested the injection of a solution of ammonia into the veins, which had been so useful in snake-bites, and might be resorted to in these cases with good effect.

Mr. WM. ALLINGHAM gave an account of a death from chloroform which occurred at St. Mark's Hospital, and stated that, in this instance, the patient had taken chloroform before without difficulty, and he recalled three other instances.

Mr. CARE JACKSON drew attention to the number of fatal cases occurring in the practice of a comparatively small number of practitioners.

Mr. BAILEY considered that Mr. Clover's was the best method, as it insured only four or five per cent. of chloroform being used at a time, and that it was important to remove the inhaler directly the patient had taken enough, as otherwise too much was absorbed.

Mr. HOGG stated that since the introduction of the methylene bichloride by Dr. Richardson, he had used nothing else. He had given it in 2000 cases. He had never had an accident, and in an experience of twenty-three years he only remembered two deaths from chloroform at his hospital.

The debate was adjourned until the following Monday.

Reviews and Notices of Books.

Sopra il Metodo seguito negli Esperimenti sugli Animali Viventi nel Laboratorio di Fisiologia di Firenze. Conni del Prof. MAURIZIO SCHIFF. Second Edition, small 8vo, pp. 78. Firenze, 1874.

PROFESSOR SCHIFF'S name has been so recently before the public in a manner which must have left on some minds serious misgivings regarding his views on the infliction of pain upon the lower animals, that it will no doubt be satisfactory to such persons to have any further evidence which can be supplied them upon this point; and it is partly for this reason, and partly because of the importance of the subject of anæsthetics, that we now call attention to the second edition of the above-named work of his, recently published.

In Germany, curara is a very favourite drug with experimental physiologists, and is used largely in place of chloroform and ether. Professor Schiff, however, states his opinion, founded on observation, that although curara, when given in large doses, does destroy sensibility, it does not act in this way until some time has elapsed after the cessation of voluntary movements. While, then, he feels convinced that curara does produce anæsthesia, he cannot be sure when this condition commences; and for this reason he refuses to make use of an agent which is, perhaps, more convenient for his purpose than any other which modern science offers.

The investigations on ether and chloroform recorded in Professor Schiff's work are very interesting and of great practical importance; indeed, he thinks they warrant him in entertaining a hope that they may lead to the discovery of some certain means of restoring the circulation after that syncope has occurred which is at present the great danger in the administration of chloroform.

The general conclusions arrived at by the Chloroform Committee of the Royal Medical and Chirurgical Society of London, regarding the effects of ether and chloroform on the circulation and respiration, are as follows:—

	ETHER INHALATION.	CHLOROFORM INHALATION.
(1) *The Heart.*		
	The muscular movement is but little influenced. The first or stimulating effect is less sudden and more sustained. Even after insensibility is attained, its action is more vigorous. Ether may be considered in a certain degree as a stimulant to the heart's action. The mercury of the hæmadynamometer at first is absolutely raised, never falling until the respirations cease.	The heart is at first stimulated and its contractive force augmented, but after this its action is depressed, and although the respirations go on properly, its action, as shown by the hæmadynamometer, when connected with the circulation of the animal, fails, and the mercury falls.
(2) *Respiration.*		
	With strong inhalation there is a temporary arrest of respiration, but it is less marked than with chloro-	With strong inhalation there is a temporary arrest of respiration dependent on spasm. This arrest after a

form. With small quantities there is no arrest of the breathing, although the number and depth of the respiratory efforts are diminished; after a short time the respirations become full and slow; and next, while their frequency rises, the range of their movements is reduced.

(3) *How life is arrested.*

The effects produced in a strong quantity equalled those of chloroform in a small, but with an important contrast, that it exerted but very slight depressing influence on the heart. Death occurred by failure of respiratory movements, the heart's pulsations continuing generally for some time after the respiration had ceased.

Strong inhalation caused the pulse and respirations to cease nearly simultaneously. In the majority of cases the pulse stopped before the respiration, and the heart's action could be distinguished for some time after the pulse had ceased.

The main points brought out here are, that the effect of chloroform is primarily upon the circulatory system, that of ether upon the respiratory. These conclusions Professor Schiff's investigations corroborate; but he makes important additions to them. He says that even when etherisation is pushed to such an extreme that the respiratory movements cease, life is, notwithstanding, never menaced if artificial respiration be at once employed. Chloroform, on the other hand, acts primarily and specially upon the vaso-motor nerves both of the heart and bloodvessels, so that the pressure of the blood within them is speedily lowered, whereas, in the administration of ether, it is never very materially diminished, and often increased. Both ether and chloroform, when pushed to the extreme, paralyse (1) the respiratory movements, (2) the vaso-motor nerves in general, (3) those of the heart; but ether invariably produces its effects in this order, while in the case of chloroform the order varies. And even when respiration ceases first, and the administration of chloroform is stopped, and artificial respiration employed with apparent success, the temporarily re-established respiratory movements may again cease, and death ensue owing to the disturbance of the circulatory system. This, Professor Schiff states, is never the case with ether; for if the respiratory movements be once re-established by artificial means after this agent has caused their cessation, they always become more frequent when the animal is left to itself. From the results of his experiments, Professor Schiff goes as far as to say that in the present state of science every medical man is responsible for every case of death occasioned by the administration of ether, since he can prevent death if he carefully watches the respirations; but this is not the case with chloroform, as its fatal effects vary with idiosyncrasies which the physician is unable to recognise.

The great importance of Professor Schiff's investigations lies in the prominence which he gives to the general vaso-motor paralysis in the production of the fatal results occasioned by chloroform, for he believes that he has proved that to this is in a great measure due the paralysis of the heart, and it is this discovery which gives hope that means may be within our reach for preventing this fatal occurrence. He finds that by compression of the aorta, or even of the abdomen only, the blood-pressure, which has gone down almost to zero from the effects of an overdose, rises often nearly to the normal in a manometer placed in connexion with the carotid. Hitherto our efforts to restore the circulation have been directed towards the heart itself, and galvanism has been applied without much success. But Professor Schiff's researches seem to indicate that the heart's syncope may be to a great extent due to the diminution of the pressure of the blood upon its internal surface consequent upon a similar condition of the vascular system in general; and hence future attempts at resuscitation may have to take an entirely different direction, and seek to act upon the heart indirectly through the medium of the blood-vessels. The good results obtained from transfusion in cases of syncope seem thus to find a ready explanation, since by this process the blood-pressure is at once increased.

It is interesting to observe how the results of these experiments are borne out by our knowledge of physiology and pathology. We have, on the one hand, an instance of physiological diminution of the heart's action by lessening of the blood-pressure, which we may liken to the action of chloroform; and, on the other hand, we have instances of increased cardiac action and consequent hypertrophy owing to increase of the blood-pressure, which we may liken to compression of the aorta in Schiff's experiments. Thus cardiac hypertrophy may result from any obstruction to the onward flow of blood, such as occurs, for example, in disease of the aortic valves producing regurgitation, or in renal disease, and especially in that form which is known as "contracted kidney." On the other hand, we have the physiological action of the "depressor nerve" of the heart, which is considered to be as follows. Being an afferent nerve from the heart to the centre of the vaso-motor nerves of the whole body, which is situated in the medulla oblongata, it acts in an inhibitory manner upon this centre. In consequence of this, the streams of nerve-force which previously radiated to the bloodvessels in general, and produced a certain degree of contraction of their muscular fibres, are now diminished, the vessels dilate, and the blood-pressure within them, and, as a consequence, within the central organ, too, is diminished, the result being a diminution in the frequency of the heart's contractions.

The Microscopic Structure and the Mode of Formation of Urinary Calculi. By H. VANDYKE CARTER, M.D. Lond. With illustrations, pp. 51. London: J. and A. Churchill. 1873.

THE value of this work, fortunately, is not to be estimated by its size. In fifty-one pages the author has given the results of patient and careful observations of the chemico-microscopical composition of urinary calculi. From what had been previously written concerning the formation of calculi it might at first be imagined that very little more could be added to our knowledge, but Dr. Carter has shown that we have by no means exhausted the subject, if, indeed, we have not gone far astray. With remarkable ingenuity Dr. Carter has applied the theory of the "molecular coalescence" of Mr. Rainey to lithiasis. The author maintains that urinary calculi are not formed by the mere precipitation or aggregation of ordinary crystalline and amorphous deposits, held together by means of mucus, &c., but that, in certain conditions of the urine, or of the mucous secretions of the ureters, bladder, or urethra, a colloid substance is produced which determines the process of the so-called "molecular coalescence," by which small, firm, rounded, or amorphous bodies are formed from the urinary constituents, which serve as a nucleus for the calculus. Once formed the calculus will grow in virtue of the same process which determined the formation of the nucleus. The mucus which coats the nucleus acts as a colloid substance, which in turn induces the "molecular coalescence," so that fresh layers are constantly being added to the original fragment.

The author moreover furnishes some very interesting in-

formation on the comparative frequency of the various constituents of calculi. In speaking of oxalate of lime in calculi he asserts that its comparative frequency in them has no counterpart in the ordinary deposits from the urine. "It is," he says, "the most common ingredient, occurring in 70 per cent. of these calculi, and it formed the nucleus of more than 35 per cent.: in order of deposit it may precede or follow uric acid; it rarely precedes the urates, but very often succeeds them; more often than either does the oxalate induce precipitation of the triple phosphate." It must, however, be remembered that here the author is speaking of calculi obtained in India, and that these differ in their comparative composition from calculi obtained in this country.

Dr. Carter's observations and experiments throw considerable light on the origin and the determining cause of urinary calculi; and they tend also to discredit the value of lithonotriptics in a fully-formed calculus, inasmuch as even after the saline or mineral substances have been dissolved by chemical agents an organic matrix remains, which not only cannot be dissolved except by strong reagents, but which favours the recurrence of "molecular coalescence."

We might speak at greater length of this valuable and suggestive work, but the nature of the subject and the style of the author require close personal study for their full comprehension. The book is well printed, and the coloured engravings are admirable. Altogether, we can heartily commend the work, which confirms the author's reputation for accurate and careful observation.

REPORT
OF
The Lancet Sanitary Commission
ON
THE DWELLINGS OF THE POOR.

No. II.—SOHO.

IT may surprise some of our readers that we have made the district of Soho the object of our first inquiry. We have done so, however, not without due consideration; and a glance at the returns of the Census of 1871 will show that we have selected the most crowded division of the metropolis. The entire metropolis at the last Census contained 3,254,260 inhabitants, dwelling in 417,767 houses, in an area of 75,362 acres. This gives us a population of 43 to the acre, and rather less than 8 inhabitants to every house.

Name of locality.	Population in 1871.	No. of inhabited houses.	Area in acres.	No. of inhabts. per acre. (Roughly)	No. of inhabts. in each house. (Roughly)
THE ENTIRE METROPOLIS ...	3,254,260	...417,767	...75,362	... 43	... 8
WESTMINSTER DISTRICT ...	51,181	... 4,554	... 216	... 237	... 11
(1) *St. James's-sq. Sub-district* ...	10,472	... 1,384	... 84	... 125	... 8
(2) *Golden-square Sub-district* ...	12,869	... 1,111	... 54	... 238	... 11
(3) *St. Anne's, Soho, Sub-dist.*	17,502	... 1,337	... 54	... 325	... 13
(4) *Berwick-street Sub-district* ...	10,287	... 722	... 24	... 428	... 14
St. Giles's, South, Sub-district ...	19,109	... 1,214	... 64	... 298	... 15
Spitalfields Sub-district	15,843	... 1,431	... 52	... 304	... 11

We have not made calculations for every sub-district, but, judging from a cursory inspection of the figures, we think we are right in stating that the Berwick-street district in Soho is the most crowded in the metropolis; and since no idea can be given in the census returns of the size of the houses in the district, the number of inhabitants to the acre is perhaps the safest criterion of overcrowding.

When we consider that in the Berwick-street district every patch of eleven square yards "maintains its man," it is evident that, in order to form the necessary thoroughfares, humanity, with its goods and chattels, must be congregated, as it were, into heaps on either side of them.

The Soho district was formed in the latter half of the 17th century, and was once fashionable. Lord Bolingbroke, Secretary-at-War, in 1704 lived in Golden-square. The Duke of Monmouth had a palace in Soho-square. Many other nobles and persons of consideration lived in the neighbourhood, and the houses generally have a look of decayed respectability. The majority of them are probably a hundred years old, and now that the descendants of their former inhabitants have migrated across Regent-street, which forms an effectual screen to shut off the squalor which lurks behind its eastern side, these houses have been converted into lodging-houses for the poor, a purpose for which they are in no way suited. They are old, and difficult to keep in repair—tumbledown places many of them; and we do not see that by the exercise of any amount of ingenuity they could be converted into healthy residences for the swarms who crowd every floor and every room. In many of them, every room, or at most every two rooms, form practically a separate tenement, occupied by a separate family, but lacking all those necessary appliances which every separate tenement ought to possess.

There is another reason why we have chosen Soho as the district in which to make our first series of observations. It is a classic spot in the history of public health. It was almost decimated by the epidemic of cholera in 1854, and the Broad-street pump, the history of which is probably known to every well-educated physician in Europe, was situated in the very centre of it. The overcrowding in this district in 1854 was very great, and sanitary regulations, both public and private, were utterly neglected. The public sanitary condition of the district, by which we mean the condition of the sewers and water-supply, has no doubt been much improved, but we believe that the private sanitary condition, the condition of the rooms occupied by separate families, is as bad as it was twenty years ago.

In making an inquiry of this sort it is impossible to follow the example of the Cholera Commissioners of 1854, and make a regular house-to-house visitation. Such a course would not be feasible for a private individual for several reasons. First of all, the poor are very intolerant—as, indeed, they have a right to be—of anything like impertinent intrusion, and the suspicion once aroused that a spy was among them for the express purpose of viewing the nakedness of the land, they would probably stick at nothing in order to frustrate his plans. The sight of a note-book or a foot-rule fills them with apprehension, and at once effectually stops all communication, so that all notes of our visits have been made surreptitiously, as it were, after leaving the house, and all measurements have been but roughly taken with a walking-stick notched into feet and inches. Great care has to be taken not to excite the suspicion of the landlord of the house, who is not unnaturally fearful that your inspection of his property may lead to its depreciation. It is on this account that we have not thought it advisable to attempt to visit *all* the rooms in any of the houses, since this could only have had the effect of attracting the notice of the landlord, who, if he took no stronger course, would certainly have sufficient control over his lodgers to make them hold their tongues or answer all questions in the manner which best suited his purpose. Our position and knowledge as medical men have made it feasible for us to make our visits assume a professional character, and in so doing we have

been much assisted by many medical men residing or having business in the various districts we have inspected. Our information has been elicited during conversations about the ailments of the inmates of the rooms, and are more likely to be correct than if they were the answers to a file of interrogations fired point blank at them in an official and (to them) an alarming manner.

Our first visit was made to a house in Marlborough-row, for the ostensible purpose of visiting a child who presented symptoms of incipient tubercular meningitis. Marlborough-row is a cul de sac having dwelling houses only on one side of it. It is about 200 feet long, and contains nine houses. In the map of the district published with the report on the cholera of 1854, we find that it is an historical landmark of some interest, as it forms part of the western boundary of the site occupied by the plague-pit of 1665. In September, 1854, this row contained 167 inhabitants living in seventy-two rooms, in eight houses, and we find that among the residents there were sixteen deaths from cholera, or nearly one in ten. The family we visited here consisted of a man and his wife and four children, who lived in the third floor back, and inhabited two rooms. The rooms were 6 feet 2 inches high, and one of them was very irregular in shape; but on the most liberal calculation, these six persons had not more than 1300 cubic feet of space to dwell in, not taking into account the space occupied by furniture, which, consisting as it did of three beds besides all their other worldly possessions, was not inconsiderable. There was a window front and back, and when we were there, on a summer-like April afternoon, they were both open, and there was complete through ventilation. In the third floor front, consisting of one room, we were informed that there were three persons living—a man and his wife and one child; so that on the entire floor there were nine persons living in three rooms. In 1854 we find that the same floor was occupied by five persons—a man and woman and three children. The house consists of five storeys—a basement and four storeys above it; and, as we went up and down the stairs, we could see through the open doors that the rest of the house (basement included) was all more or less densely populated. The rent of the third floor back is four and sixpence a week, and since the occupiers are nearly £3 behindhand in their rent they do not come in for the full share of whitewashing, papering, and painting which is accorded to the other lodgers. The back room had last been whitewashed by the woman herself about a year and a half ago, and consequently had now become a rich brown colour. The woman had also partly papered the front room at Christmas "with some paper she had by her," and this decorated patch stood out in bold relief from the griminess which surrounded it. The husband was a porter, and the woman used to do a little "chairing," but since her last confinement, which had been followed by "flooding," she had not been equal to her work, and hardly equal to her home duties. She was no longer able, she said, to go up and down stairs as she used, and, since all water has to be brought up from the basement by hand, and all slops taken down to the sink in the basement by hand, and since the return journey involves the traversing of between eighty and ninety steep wooden steps, the going up and down stairs ought to form a very considerable portion of the daily duty of a housewife living in a third floor in this and similar houses. The woman was forty-four years of age, and had been confined thirteen times, but only nine of her children had been born alive. Of the four living with her one was a girl about fifteen, upon whom devolved the main of the housework; two children were at school, and one, a boy "turned seven," had not been well, and had been constantly troubled with diarrhœa, ever since a fall over the banisters which had broken his arm. The youngest was the patient, who was sitting in a dirty bed, with a shaven crown, but did not appear very ill. There was one water-closet and one water-cistern for the entire house, and to these all the lodgers had access. The woman explained to us that she could not permit the younger children to go down to the common closet, as it was used by all ages and both sexes. The dejecta of the little ones were, therefore, kept in the dwelling-room, and ultimately taken down stairs by hand. A visit to the so-called water-closet, which was situated in the position usually occupied by the coal-cellar, and was lighted by a grating in the pavement, forced the reflection upon us that the more decent lodgers in the house probably followed the course pursued by the woman on the third floor with her young children. This closet was in a filthy condition: the pan half full of soil, the seat fouled, and the floor wet. The water-supply of it was from the cistern, and was admitted by turning a tap. The tap turned with difficulty, and the water did little more than trickle into the pan. The most serious defect of lodging-houses of this kind is the limitation of the water-supply entirely to the basement, thereby rendering personal cleanliness a physical impossibility to those who live on the upper storeys. A glance at the walls and the stairs of this house in Marlborough-row showed us that cleanliness was at a discount. The weak physical condition of the woman, and the very inefficient apparatus for water-carrying which she possessed—consisting of an ordinary bedroom jug without a handle and holding at the outside a gallon,—were quite sufficient excuse for the small amount of washing which she bestowed upon herself, her children, and her rooms. The chief part of the household washing was done by the girl at the public wash-house, but the woman washed some of the things herself at home. "What cooking they did"—which the woman sadly explained was "not much"—was also done in these rooms, which were encumbered with all the apparatus necessary for existence: table, chairs, beds, washing-pan, sooty cooking utensils, and litter of various kinds. The water was clear and without taste or odour, and was not probably the cause of the "horrid metally taste" which the woman said they had all had in their mouths of late. The water-jug was not very clean; for "you see," she explained, "since it has got no handle, I have been obliged to tie a cord over the top, and now I can't get my hand in to clean it."

According to Dr. Parkes (who quotes Mr. Muir) the amount of water used per head in model lodging-houses for personal and domestic purposes is seven gallons. If this family wished to emulate the very moderate cleanliness of their more fortunate neighbours in the model lodging-houses, they would require 42 gallons of water per diem. Now an ordinary washing jug filled with a gallon of water weighs a little more than 14lb. Forty-two such jugsful would weigh 588 lb., and the labour entailed on a woman weighing 8 st. in carrying this amount of water up a staircase 40 ft. high would equal between 80 and 90 foot-tons. How many foot-tons would be represented by the forty-two return journeys with the empty jug we are unable to say; nor can we calculate the labour entailed in returning these 42 gallons of liquid in the form of "slops" of one kind or another to the sink in the basement. Such deep calculations we must leave to Professor Haughton. We have merely indulged in these few figures for the sake of showing the utter physical impossibility of anything approaching to cleanliness under such circumstances. Supposing, too, that the time occupied by each water journey was five minutes (that the work was done without resting and without intermission, and that the woman had never to "wait her turn" at the cistern below), then the total time occupied in procuring the necessary water would amount to *three hours and a half*. This ideal task is one which would tax the strength of a strong trained man to accomplish, and is of course absolutely beyond the powers of most women. To a woman weakened by want and disease, whose heart "flutters and trembles" at the least exertion or excitement, such a task would probably be fatal. Taking all the facts into consideration, we should consider that women had done their duty if they succeeded in the no mean task of hauling three gallons of water a day to rooms on the third floor of a high house. It is not to be wondered at, too, that the habit of throwing slops out of window, or of using the water-gutters of the houses as sinks, is a habit against which sanitary authorities have had to contend.

It would be conceded by most people that, if we could manage to enforce cleanliness in the homes of the poor, a great deal would have been done; the main thing perhaps would have been accomplished towards the amelioration of their sanitary condition. Yet how is cleanliness to be enforced under such conditions as we have depicted? All the sanitary inspectors in Christendom, and all the Acts of Parliament that could ever be passed, would not succeed in making the poor rich, nor in endowing a weak woman with the strength of a steam-engine. If those so-called friends of the working-classes who shout so loudly for a "free breakfast-table" would devote some of their energies to the procuring of free water—a constant supply, that is, to every floor of every lodging-house—they would do more for the

welfare of the poor than could be effected by any amount of cheapening of colonial produce. Water is the very basis of sanitation, and if it be not made easily procurable to the dwellers in the overcrowded lodging-houses of London, the pestilence which walketh in darkness will be upon us in spite of all our skilled supervision and increased knowledge, and will teach us that too great a regard for English liberty and vested interests may really amount to a criminal neglect of the real welfare of the people.

It is not our object to make needless repetitions of the same story; and our readers may take our word for it that the state of things depicted above is not an uncommon one in Soho. In a second-floor back in Bentinck-street we found a man and his wife and five children inhabiting two small, dirty, dingy rooms. The mother was unkempt and dirty, and so were the children; and no wonder, for the only means they had of bringing water up-stairs from the yard below was a *spirit jar without a handle and without a neck*. A more awkward thing to carry cannot well be imagined, and how it was cleaned out we omitted to inquire. The lack of water, together with the fact that a small heap of coals had been thrown on the floor of the room and a sort of dustbin had been extemporised in one of the corners, were sufficient to account for the filthy condition of the apartments.

From here we went to a first-floor front in South-row to see a family inhabiting three rooms. The rooms consisted of a main room of a tolerable size and two very small rooms. Here lived a tailor and his wife with their six children. The tailor was apparently a master man, and employed three or four additional "hands," so that during the day a dozen people were crowded into these rooms, and during the night eight. The woman herself was ill. She was forty-three years old, and had had nine children, of whom six were living. She had lately been confined in Queen Charlotte's Hospital; but since her discharge she had been "laid up at home" with an abscess, from which nearly a quart of matter had lately been let out. She was lying on a bed doing needlework, with the door between herself and the work-room open. Under her bed was a chamber utensil containing an evacuation.

In two rooms at the top of a house in Broad-street lived a boot-maker and his wife. Their condition ordinarily might not have been very bad, but since the woman was suffering from cardiac dropsy and her legs were enormously swollen, so that going up and down stairs had become impossible, the labour of getting water up-stairs and slops down-stairs must have been a considerable addition to the man's daily work.

CONSTRUCTION OF HOSPITALS FOR EPIDEMIC DISEASE.

IT will doubtless be in the recollection of our readers that Drs. Gairdner and Russell strongly urged on the local authorities of Glasgow the expediency of erecting a hospital for small-pox patients at Belvidere, instead of continuing the hospital at Parliamentary-road for the treatment of such cases. The Committee of Health recommended that the erection of this building on the site proposed by them should be no longer delayed, and the Glasgow Board of Police fully concurred in this recommendation. Recognising the magnitude and importance of the interests involved, however, the said Board appointed a deputation, consisting of Messrs. Ure and McLellan, the medical officer (Dr. Russell), and the Master of Works, to proceed to London and other cities, and report the result of their investigations into the construction of small-pox hospitals. A copy of that report is now before us, and the observations and criticisms it contains, being of a clear, practical character, call for some notice at our hands. The members of the deputation visited and inspected a large number of hospitals, both metropolitan and provincial. Without attempting to embody all the details noted and utilised, they have, nevertheless, stated the principal results of their observations in regard to epidemic hospital construction. *Imprimis*, the pavilion system is universally accepted as the only one suited for the treatment of contagious diseases. Some objection is taken to the deviation from the original idea of a pavilion in the London hospitals of two storeys in height caused by the value of ground; and the deputation adhere to the open-roofed ward—raised from the ground level, so as to allow a free space between the floor and the ground—which has been adopted in their existing hospitals. The deputation reports against the union of the pavilions by covered and enclosed passages or corridors, and in favour of their own plan, where no such connexion exists. A continuous communication between wards or blocks by closed corridors sacrifices, as they very correctly think, the essential idea of the pavilion—viz., the isolation of the hospital unit or ward by open air—for the sake of administrative convenience. The corridors of the Herbert Hospital (a general hospital) are the most unobjectionable that could be devised. If any provision is to be made for communication, a covered way with open sides, such as unites the pavilions of this hospital with the administrative block, is the only plan which meets with approval. Coming to the hospital unit or ward, the small-pox hospitals at Stockwell and Homerton give a cubic space of 2123 feet to each patient; and the deputation recommend the adoption of 2000 cubic feet, which is an additional provision of 500 cubic feet to their existing hospitals. In reference to the disposition of cubic space to the bed, they consider wards of twenty-six or twenty-eight feet broad, as at Stockwell and Homerton, of unnecessary width, and propose for their new wards twenty-two feet in this direction. As regards convalescent wards, they deem the plan of providing a distinct "convalescent ward," where convalescents both sleep and sit, to possess advantages. It is pointed out, however, that as the patients will be going about and be much out of doors, the increased cubic space is unnecessary; but, to afford more room to those moving about, the convalescent ward should be two feet broader than the main ward. As a larger proportion of small-pox patients than of fever patients are convalescent at one time, the distribution of the beds may be altered from eleven and five to ten and six for acute and convalescent wards. As a very material aid for ventilation, it is recommended that in the construction of the open roof the principal rafters should be of light T iron, and the ties of thin rod iron. The choice of the best material for rendering the walls impervious is left open for the decision of the Board; but the woodwork of the roof should be varnished. A floor of closely laid oak, without the waxing, is suggested as practically presenting the most impervious surface. As the result of comparative trial, a small portable boiler, with an open fireplace, in the bath-room of each ward, is recommended in preference to a large central boiler as the source of hot water for baths, &c., on the ground of economy as well as of effective sanitation. The wards to be erected are for 160 beds, but as, under temporary pressure, additional temporary pavilions might be requisite, the deputation advise the scale on which the administration is planned to be in excess of the immediate requirements of the wards to be erected. In one essential respect—that of disinfection of all excreta from affected patients before reaching the sewers—the deputation consider the practice pursued at the Glasgow Small-pox Hospital to be superior to that of other institutions, and they suggest that the charcoal system might possibly be advantageously adopted in the hospitals at Belvidere. Such may be taken as a *précis* of what we consider a well-weighed and practically critical report on the part of our Glasgow friends.

AT the annual meeting of the Hospital for Infectious Diseases, Liverpool, held last week, it was stated that 73 persons had been admitted during the past year. Of these 33 suffered from enteric fever, 8 from typhus, and 14 from small-pox. The total mortality was 12, 61 patients being discharged convalescent. It is a noteworthy circumstance, and one proving the urgent necessity of removing patients while in the early stage of disease, that one-fourth of the twelve deaths occurred within twenty-four hours after admission. The resident medical officers of some of the metropolitan hospitals and infirmaries often complain of having to receive persons suffering from serious diseases while in a moribund condition or in a state offering but very little prospect of recovery.

THE LANCET.

LONDON: SATURDAY, MAY 16, 1874.

THE *Quarterly Review* has an article on the Medical Charities of London, founded, first, on the Report of the Metropolitan Hospital Sunday Fund, and, secondly, on Reports of the Committee and Sub-committee appointed two or three years ago to inquire into the subject of out-patient administration in the metropolis. The article is meant to inform the public on the nature of the different medical institutions which relieve the sick among the working classes, and on the various claims that these institutions have on philanthropic persons generally, and particularly on the Hospital Sunday Fund. The writer points out the difference between a general and a special hospital, and between a hospital and a dispensary; and, on the whole, fairly and moderately states the question of the uses and abuses of these institutions. But there is little in the article or in the data on which it is based which is original, or which would be of value to our readers. They would be grateful for the way in which the feeling of the medical profession in regard to medical charity is stated. "If a hospital or a dispensary for the sick poor is required, and the public will give their money for the purpose, the medical man will contribute his quota to the charity by personal service. But if the understanding is of this nature, the conditions of the contract must not be strained so as to impose upon him an excessive amount of labour, or to encroach upon the legitimate sphere of remunerative practice." The medical profession, in other words, is as charitable as ever—as ready to *give* its services where *giving* is really the kind thing to do; but it is determined to disabuse the poor of the notion that medicine and medical advice are things that are not meant to be paid for, and that doctors are a sort of public property, at the beck and call of anybody that likes to ring the night bell or demand advice. The article runs in the line of what it calls the Report of the Berners-street Committee, recommending the institution of provident dispensaries, their affiliation with hospitals, the reduction of the number of the out-patients of hospitals by abolishing governors' letters, the establishment of a system of examination of applicants at all hospitals by an officer selected for the purpose, and the appointment of an officer at every hospital who should inquire diligently into the cases of applicants, and refer them respectively to the hospital, the provident dispensary, or the parochial medical officer. The writer makes an original suggestion for the guidance of the Distribution Committee of the Hospital Sunday Fund in regard to the London dispensaries—viz., to give subsidies to the outlying dispensaries, which are distant from hospitals and do the work of hospitals to a great extent; but not to those in the central districts or in the proximity of great hospitals, unless they adopt the provident principle. The writer gives no proof that central dispensaries have less poverty to deal with, or a less fit set of cases, than suburban ones; and his suggestion cannot be acted upon safely without further information on these points. On the whole, the article adds little to our knowledge of the subject of which it treats. What we really want to know is the extent of that class—very much entitled to consideration—which lives above pauperism on scanty means. The articles unfortunately go on repeating each other, and often repeating statements that have been shown to be fallacious or erroneous, without giving us any fresh light on the nature and causes of poverty, especially poverty produced by family sickness, and with special regard to the case of London, where, to use the language of the *Quarterly*, the circumstances of human life are so intricate and fluctuating. The writer is evidently considerate, and anxious not to be unkind; moreover, he is moderate in his proposals and sensible in many of his reflections. But what the public wants now are facts, the results of personal observation at once critical and charitable, and the correction of gross and obvious errors of statistics; and the writer makes no contribution to the supply of these wants.

Turning from the somewhat trite and tame article of the *Quarterly* to the *Westminster* for April, we have a more pretentious deliverance on the same subject—one in continuation of that in the January number upon which we have already commented. The first article in the *Westminster* occupied fifty pages; the second exactly the same. It is a pity that more compression cannot be practised by writers on practical subjects. Such elaborate stringing together of everything relevant and irrelevant to the question gives a literary and unpractical aspect to what is an intensely practical subject. The noticeable feature of the article is the admission by the writer of the failure of the provident system in London as distinguished from the country. This failure, he says, is generally confessed. Thereupon he proceeds to describe the Irish dispensary system, and he winds up his long dissertations by recommending the application to England of the Irish Dispensaries Act, stipulating that no one is to receive relief who is well enough off to contribute to a provident dispensary, and that medical relief shall not entail disfranchisement on the recipient. The compulsory establishment by Parliament of a national dispensary system would, it is expected, supersede the out-patient department of hospitals and free dispensaries, and leave provident dispensaries the only alternative to the British working man. In case these effete forms of charity should not disappear quickly enough, the Charity Organisation Society is to be called in, and that failing, the Home Secretary is to be called in. But a still more striking proposal crowns this disquisition of a hundred pages—viz., to entirely remodel and revolutionise the hospital system of London by establishing three kinds of hospitals: the poorhouse infirmaries; the public hospitals; and the provident hospitals—the poorhouse infirmary for the members of the poorhouse community; the public hospitals for patients from district dispensaries to be established by the Irish Act; and the provident hospitals for patients from provident dispensaries. The writer—it is to be hoped that Mr. Secretary CROSS is not a friend of his—suggests that the great endowed hospitals, and all hospitals with medical schools attached, should become public hospitals; we pre-

sume under the governance of the Local Government Board, and that all appointments be made by a process of competitive examination. Fancy all our great hospitals regulated on Gwydyr House principles. The effect of such proposals is to take away the breath. When we have recovered breath—if we ever do—we may dilate a little more on this great scheme for abating pauperism, multiplying hospitals, and increasing the independence of the profession.

Had these objects not been written so large on the article in the *Westminster*, we should rather have considered the object of the writer to be to convert our great hospitals into workhouses, and our medical teachers into Poor-law medical officers; to put a parliamentary extinguisher upon public charity; and to leave a number of sick poor to fall between the two stools of pauperism and providence. As for medical education, hospital practice under this new system is to be entirely confined to the cases of paupers coming into hospital from the public dispensaries. Let us hope that Mr. Secretary CROSS will think twice before he tries such wild experiments.

LAST week a very important grace was passed by the Senate of the University of Cambridge, which will prove a material boon to the students of Medicine and Natural Science who contemplate proceeding to the University. It may be known to our readers that the two Universities, Oxford and Cambridge, have united to institute examinations of students who are about to leave certain schools; and have determined, as part of the scheme, to grant certificates to those who pass examinations in school subjects in conformity with the regulations issued. These regulations indicate that the examination will be a thoroughly good one; and it is to be conducted by examiners appointed by the Universities, with assistance from the schools. Oxford has already agreed to accept these certificates in lieu of Responsions; and Cambridge has now determined to accept them in lieu of a part or the whole of the Previous Examination. The Previous Examination is the only test of general education (Classics and Mathematics) required of students of Medicine and Natural Science. In future, therefore, undergraduates who shall have obtained these certificates before proceeding to Cambridge will be free to devote their whole time at the University to the study of Natural Science and Medicine, and may be expected to make more progress in them than they have hitherto been able to do. Of the wisdom of this decision we cannot entertain a doubt, and we may anticipate a decided impulse from it to the study of all the various sciences, including the higher branches of Classics and Mathematics, as well as those of Natural Science and Medicine. If a lad, while at school or upon leaving school, can satisfy the University examiners that he has attained that knowledge of Classics and Mathematics which the University deems requisite as the basis of a liberal education, by all means let him be allowed to do so, and let him be at once free to pass into the higher levels of those studies, or to enter upon such other studies as it may be his intention to follow, instead of being required to wait, as has hitherto been the case, till the time arrives for the Previous Examination. Recent University legislation has been tending in this direction. The time fixed, or rather allowed, for passing the Previous Examination has been gradually shifted to earlier periods of the undergraduate course, from the fourth to the second and recently to the first term; and now the equivalent to this examination may be passed before entering the University. We have said that this new examination for certificates bids fair to be of a high order; and the passing it may be taken as good evidence of the fitness of the lad for entering upon a University course. A lad who passes this examination with distinction—and he must do so with distinction to escape the entire Previous Examination—will in all probability prove himself to be well worthy of the advantages of a University career; and, being able to devote his whole time at the University to the Natural Sciences and Medicine, he will be likely to take a high place in the Tripos of the former and to pass with credit the examinations in the latter. For the present the examinations will be held at certain schools only, chiefly public schools. We hope means may be found to extend them to other schools. But that an opportunity of offering themselves for them may be given to lads from other schools, certificate examinations will be held at Oxford and Cambridge, which will be open to all schools; and a notice has been issued (see *The Times* of May 8th) that the first of these examinations will commence at Cambridge on the 14th of July, the names to be sent in before June 1st to A. ROBINSON, Esq., New College, Oxford, or to J. S. REID, Esq., Christ's College, Cambridge. The local examinations which have for some years been instituted by the Universities are rapidly extending their influence, and have perhaps done more than any one other thing to improve the education of the middle and upper classes of English boys. These new examinations are likely to produce a similar and not less important effect. We may expect that they will stimulate the teaching in the schools, and cause the pupils to enter the Universities better prepared for the higher courses of teaching which are there given, and thus tend to elevate the study in the Universities, as well as in the schools.

A VERY full report on an Epidemic of Cerebro-Spinal Meningitis has just been published by Dr. J. B. UPHAM in the "Fifth Annual Report of the State Board of Health of Massachusetts." The disease under different names has been long known to the medical profession in various parts of the world; and its appearance in a sporadic form some years ago in Ireland, it may be remembered, formed the subject of some papers read before the Epidemiological Society, and gave rise to an interesting discussion at that Society. This country has, so far, happily been spared from an epidemic visitation of this disease. The portraiture of the malady, as delineated by Dr. MEREDITH CLYMER in his monograph on the subject published in Philadelphia in 1872, is adopted in the report before us. Dr. MEREDITH CLYMER defines it as follows:—An acute specific disorder, commonly happening in an epidemic, general or limited, and, rarely, sporadically—caused by some unknown external influence,—of sudden onset, rapid course, and very fatal. Its chief symptoms, referable to the cerebro-spinal axis, are

great prostration of the vital powers, severe pain in the head and along the spinal column, delirium, tetanic and, occasionally, clonic spasms, and cutaneous hyperæsthesia, with, in some cases, stupor, coma, and motor paralysis, attended frequently with cutaneous hæmic spots; the morbid anatomical characters being congestion and inflammation of the membranes of the brain and spinal cord, particularly the pia mater, although there is reason to believe that the evidence of these changes may be wanting, even in cases of long duration. During the early months of the past year this disease had assumed an epidemic form in Massachusetts, and was prevailing to an unusual extent in the eastern portion of the State especially. A circular was subsequently issued by the secretary of the State Board of Health, containing a series of questions; and from the replies to these a large amount of information has been collected and embodied in the report before us.

The details, more or less complete, of 517 cases are given. All ages, occupations, and nationalities were alike amenable to the disease. The age of the youngest patient on the record is five weeks, that of the oldest seventy years. The disease prevailed pretty equally in the two sexes. The character of the attack, in the large majority of instances, was sudden, without premonition or previous noticeable illness. It prevailed most extensively during the spring months. Relapses or decided remissions are referred to only in a minority of instances. The shortest recorded duration of the disease is two hours; the longest, six months. No line of therapeutical management seems to have really controlled or cut short the disease. The mortality in the 517 cases was a little less than 45 per cent.; and the visitation, compared with former epidemics, was considered a mild one.

Returns from various places all speak of the existence of a very similar, if not identical, disease among animals. Horses and cows were frequently attacked, also hens and chickens, and, in some instances, dogs and cats. The symptoms and post-mortem appearances in the horses attacked were closely allied in character to those observed in the human subject. Very little light has been thrown upon the etiology or cause of the disease. In the autumn of the preceding year a remarkable and widespread epizootic, of the influenza type, prevailed among horses. With the advent of cold weather there was an unparalleled visitation of small-pox; and coincident with the subsidence of this disease arose the epidemic in question. It is possible, therefore, that some of the recorded cases may have been a malignant and hæmorrhagic form of variola, which proved fatal before sufficient time had elapsed for the manifestation of its more specific symptoms.

AN interesting paper "On Lead-poisoning," especially in regard to the changes effected in the blood, has recently been read before the Society of Biology in Paris, by M. MALASSEZ, who has written a valuable little *brochure*, noticed in our journal last year, "On the best mode of estimating the number of the Blood-corpuscles." M. ANDRAL long ago pointed out that the blood of patients suffering from lead-poisoning was deficient in red corpuscles; but he made no attempt to count the absolute number. M. MALASSEZ has, however, taken this trouble in eleven instances; and finds that, whilst men in good health have on the average about 4,500,000 and women 3,500,000 red corpuscles in a cubic millimetre of their blood, the number fell in nine men affected with symptoms of saturnine spanæmia to 3,700,000, to 3,200,000, and even in one case to 2,200,000; whilst in two women the numbers were 2,900,000 and 2,500,000 respectively. From a consideration of the duration of exposure of the several cases to the injurious action of the poison, there seems reason to believe that the amount of "hypoglobuly," as M. MALASSEZ terms it, is in direct ratio to the length of time during which the workman has been exposed to the toxic influence of the lead, and also to the intensity of the exposure. Thus a painter who had been only five years at the work, and who presented symptoms of poisoning, had 3,700,000, another who had been seven years had 3,300,000, a third who had been twenty years 2,800,000, and a fourth who had been thirty years 2,600,000 corpuscles in the cubic millimetre. The most aged workmen had the smallest number of corpuscles; and it is interesting to observe that appropriate treatment has marked effect in increasing the number of the corpuscles, so that in one case, in which the number of corpuscles at the time of the patient's entry into the hospital was 2,400,000, after the lapse of three months and a half the number had increased to 3,500,000.

M. MALASSEZ further states that, if the red corpuscles are less numerous, they are more voluminous than natural in lead-poisoning, in the proportion of 9 : 7. Nevertheless, he estimates that the increase of volume is not sufficient to compensate for the diminution in number; for whilst the surface of the 4,500,000 corpuscles that are present in the cubic millimetre of the healthy man have a surface of 576 square millimetres and a volume of 0·324 cubic millimetres, the 2,400,000 corpuscles in the blood of a patient suffering from the toxic influence of lead would not exceed 422 square millimetres and a volume of 0·254 cubic millimetres. In the above-named patient, however, in whom the improvement continued for several months after leaving the hospital, and where the number of the corpuscles had increased, it was found that the increase in volume rather more than compensated for the slight deficiency of number. If the augmentation in the size of the corpuscles has some advantage in compensating to a certain extent for the diminution in number, it has probably the opposite effect of rendering the blood less fluid, since the corpuscles would necessarily pass more slowly in capillaries but little larger than themselves, and would likewise occupy time in adapting themselves to curves and angles. Moreover, M. MALASSEZ, in conjunction with M. POTAIN, has established the fact that serum containing 1 per 1000 of acetate of lead traverses a glass capillary more slowly than pure serum; and he finds that whilst the ordinary corpuscles of human blood rapidly become crenulated on their edges when immersed in the artificial serum he uses to enable him to count them, the corpuscles of those suffering from lead-poisoning remain for a considerable period fresh and apparently unaltered. Thus, *en résumé*, it may be concluded that saturnine intoxication causes a certain number of alterations in the blood, of which the

principal are: diminution in the number of the corpuscles; augmentation of their size—such increase being, however, insufficient to compensate for their diminution in number; a greater fixity of their morphological elements; and, finally, very probably a diminution in the circulatory activity.

WE are not surprised to hear that the keen regard to their own interests which has ever characterised the Council of the College of Surgeons as a body has recently taken alarm at the possible loss which may accrue to the existing Court of Examiners by the carrying into effect of the provisions of the proposed Conjoint Scheme. The committee of the Council appointed to draw up the amended bye-laws, of which Mr. HILTON is chairman, obtained counsel's opinion so long ago as December, 1871, setting forth that, in their opinion, the College charter required that the examiners in Surgery, under the Conjoint Scheme, should be appointed from the members of the Court of Examiners of the College; and on Thursday last an attempt was made to carry a resolution to this effect through the Council; but we are happy to learn that better counsels prevailed, and that the question has been postponed *sine die*.

We have not had the advantage of seeing the "case" on which counsel gave their opinion, nor do we know the grounds on which it is based; but a careful perusal of the College charters shows that, if it is lawful for the College to join other bodies in the proposed Conjoint Scheme, there is nothing to prevent examiners being chosen as may be most advisable. Section 20 of the charter of 1843 provides only that "there shall be ten examiners of Surgeons";..... and "that all future examiners of the said College shall be elected by the Council of the College, either from the members of the Council or from the other fellows of the said College, or from both or either of them." Now, it is proposed in the new Scheme to have eight examiners in Surgery and eight in Anatomy and Physiology; and if the College of Surgeons' charters are really as inelastic as is supposed, it would be easy to arrange that the eight examiners in Surgery, and two of the examiners in Anatomy and Physiology, should be *elected* by the Council of the College on the nomination of the Committee of Reference.

The College of Surgeons is doubtless in the dilemma that it will have to keep up a Court of Examiners for the Fellowship, and these examiners will have, as heretofore, to examine in Anatomy and Physiology, as well as Surgery. Now a man may be a very good examiner in Surgery, but confessedly unfit to examine in Anatomy and Physiology, and *vice versâ*; and we should greatly regret to have this practical inconvenience perpetuated in connexion with the Conjoint Scheme. For the purposes of that examination we ought to have the best examiners in Surgery and the best examiners in Anatomy and Physiology that can be discovered; and if the Council of the College of Surgeons chooses to make these gentlemen members of its own Court, well and good; but we protest against the idea of making a membership of that Court, subject as it is to all the private influences which govern College elections, a necessary stepping-stone to the post of examiner under the Conjoint Scheme.

Medical Annotations.

"Ne quid nimis."

LONDON AND COUNTRY DOCTORS.

SOME year or two ago we called attention, under the heading "Noblesse oblige," to the objectionable custom pursued by some London doctors of attempting to form a professional connexion around a country residence occupied presumably for non-professional purposes. We regret to have to recur to the subject, but numerous complaints reach us from time to time of the injury, both in pocket and reputation, sustained by many highly respectable practitioners in the suburbs of London through the increasing custom, as it appears, of metropolitan hospital physicians and surgeons laying themselves out systematically for country patients in their immediate neighbourhood. One can easily understand that such a ruralising consultee may be asked by a neighbouring practitioner occasionally to see a patient with him for a couple of guineas, and this both for the patient's and doctor's own satisfaction and assistance; but the case is very different when the physician or surgeon takes care to let it be known among his more affluent neighbours that he is not averse from receiving them and their guineas before going to town, or after an early return from his metropolitan duties. Suburban practitioners have become accustomed to their patients taking furtive and not always very charitable opinions as to the treatment they are being subjected to, but the trouble and fatigue of a journey to town necessarily impose a wholesome check upon the practice. If, however, physicians are to be in constant and regular attendance upon their country neighbours, at ordinary rates of remuneration or less, the pleasant relations hitherto existing between consultees and their professional brethren will be likely to undergo serious modifications.

PUBLIC MORTUARIES.

WE are almost tired of calling attention—which we do periodically—to the great want of public mortuaries in London, a city where the dead not unfrequently number a couple of thousand weekly. That we should not have any public mortuaries is a scandalous outrage on decency, but, unfortunately, some of our vestrymen care little for decency if it clashes with the ratepayer's pocket. In every parish in London almost there is a disused graveyard, so that there ought to be no difficulty in obtaining sites for buildings where the dead of the poor might await burial. We remember an undertaker of the advertising class who headed a placard, which announced the cheapness of his funeral pomps, with these words printed in letters an inch long, so that those who ran might read: "*What a nuisance a corpse is to lodgers this hot weather.*" There was little enough decency in the announcement, which was calculated to shock refined readers, but it was nevertheless true; and those who trouble themselves but little with the sufferings of their poor neighbours little think how terribly grim these sufferings become when death visits some cooped-up family, and the dead and living have to dwell for days in the same room. Any philanthropist who would build a mortuary on one of the sites we have indicated would confer an untold blessing upon the poor in his district.

At an inquest lately held by Dr. Lankester on the body of a man who died in a common lodging-house near Gray's-inn-road, it appeared that the deceased had been left for thirty hours in the lodging-house, and the landlord explained that although he was subject to a penalty for keeping a corpse in his house for more than twenty-four hours, yet he

was helpless in the matter, there being no public mortuary to which a body might be removed. "When he applied to the relieving officer's assistant, he was treated very harshly; as it was, the three men who slept in the same room refused to go to bed while the body was there, and remained up all night, and therefore could not work the next day." The coroner explained that the workhouse mortuary was the property of the guardians, and was for the dead in the workhouse, and that when the guardians allowed dead to be removed to it from outside they did so as a favour, and it ought to be recognised as such. "Notwithstanding that, the vestry ought to provide a mortuary for the public, which was imperative, not only in St. Andrew's, but in every other parish not provided with one. If a fever was to break out in some of the confined portions of the parish, and, in the absence of proper mortuary accommodation, the bodies were left in the sleeping and dwelling rooms of the poor, the results would be frightful, for the contagious disease might spread not only through the parish, but perhaps all through London." All this is, of course, self-evident, but it would seem, as is usually the case, that what is everybody's business is nobody's business.

The Mile-end Old Town board of guardians have also lately had the subject of mortuaries brought under their consideration by Dr. Snell. The clerk stated that "the guardians had no power to erect a mortuary as suggested, nor was there any law to compel the master to admit a corpse, nor were the guardians compelled to allow inquests to be held in the workhouse."

The sooner we have places where the dead may repose in decency, and in which coroner's inquiries may be held, the better. If the teetotalers, in the course of their agitation, would agitate in order that Crowner's quest law should no longer be administered in a pot-house, they would serve their cause, and all sensible people would, so far, be with them.

BOHEA VERSUS BRANDY.

IT is well known that during both the Red River Expedition and that on the Gold Coast, tea was the beverage recommended for the soldier, to the exclusion of all alcoholic liquors. We incurred a certain amount of hostile criticism by hinting that it might be expedient, if not actually necessary, to issue an allowance of spirit to troops in the field under certain circumstances. We took care to guard ourselves against being thought to advocate the indiscriminate issue of a spirit ration to men of all ages and under all and every condition of climate and service, but we nevertheless held that soldiers would probably have been benefited by a moderate allowance of spirit after a hard day's march in a malarious, moist, and exhausting climate, and our judgment in the matter has been fortified by the opinion expressed by several medical officers who took part in the late campaign. It is all very well to institute a comparison between an issue of rum and a cup of hot coffee with some addition in the way of a biscuit and meat; but how is the hot coffee to be prepared during a campaign? We tried the effect on ourselves of a total abstinence from alcoholic drinks for a brief period, and we must confess to having felt the loss of the two or three glasses of wine of which we ordinarily partake in the twenty-four hours, and the withdrawal of the wine was not followed by any increased appetite for solid food. The main thing appears to be to avoid alcohol altogether except at meals, and then, of course, only to consume it in strict moderation. To "use a little wine for thy stomach's sake" is old and very safe advice, we suspect, for men who work hard with their brains or muscles, especially in the case of those who have reached middle age. In the case of young men, or in those who are leading an active out-door life and possess a vigorous appetite, alcohol is quite unnecessary as a rule, and only useful under exceptional circumstances. It must not be forgotten, too, that there are great differences in individual constitutions in regard to the consumption of alcohol: while a moderate use of wine agrees with most people, the smallest quantity of it disagrees with others. One of the great requirements of the present day is a cheap and pleasant beverage, free from alcohol, of which persons engaged in urban pursuits can partake *ad libitum* during the summer in this country. No practice is more injurious than that of having recourse to what people please to term "a nip" of brandy in the interval between meals. The appetite is impaired and the digestion seriously deranged by such a practice, to say nothing of the fact that "it grows by what it feeds on," and a constant craving for alcoholic stimulants is soon engendered. We should be inclined to recommend, in a future campaign, a trial of cocoa or chocolate as a more portable and nutritious beverage for our soldiers than cold tea, which is not a very palatable or an entirely unobjectionable drink to many people.

THE DISPENSARIES AND HOSPITAL SUNDAY.

THE St. George's and St. James's General Dispensary, in their annual report, complain that the establishment of the Hospital Sunday "has seriously diminished the income, not only of this, but of most of the metropolitan dispensaries, in consequence of the way in which its funds have been distributed. The sum allotted to this charity was only £25 11*s.* 1*d.*, and the clergy generally feel a disinclination to give additional sermons after having preached for the Hospital Sunday." A similar complaint finds expression, we believe, in the report of the Holloway and North Islington Dispensary. The committee of St. George's and St. James's Dispensary also regret thats the committee of the Sunday Hospital Fund, in its report, attempts to disparage free dispensaries as distinguished from provident ones. The dispensaries may feel reassured after the discussion of their claims at the Mansion House, and the determination of the Council that hospitals and dispensaries should receive in the same ratio to their respective expenditures. It is to be hoped that neither the Council of the Hospital Sunday Fund nor the Distribution Committee will for the present exercise their critical faculty any further in regard to the merits of the different kinds of institutions receiving awards from the Fund. The Fund is too young yet to make criticism prudent, and the experience of the Council as a collective body is, as yet, too slight to make its criticisms authoritative. The Council has shown its wisdom this year by resolving to treat dispensaries in a conciliatory way.

SANITARY PRECAUTIONS IN THE ARMY AGAINST INFECTIOUS DISEASES.

THE Army Circular issued by the War Office for the present month contains a clause embodying the measures to be adopted in the case of infectious fevers. These measures do not materially differ from those previously in force. When a case of scarlatina occurs in quarters, the rooms are to be vacated, and the windows kept open for as long a time as practicable to insure thorough ventilation; all the carpets, bedding, &c., are to be thoroughly cleansed and disinfected; the furniture, floors, and woodwork are to be sponged and scrubbed; the ceilings to be whitewashed, and the walls, if papered, are to be repapered, after the old paper has been scraped off and removed. The proceedings to be adopted in case of the occurrence of infectious diseases

in barracks are very similar; but when it is deemed necessary to fumigate the room, this is directed to be done with chlorine, nitrous acid, or sulphurous acid gas. From the wording of the directions it would appear, however, as if the army medical authorities did not entertain a very high opinion of the efficacy of this fumigation; and we agree with them. As regards bedding, clothing, &c., the methods ordered to be adopted are—exposure to a dry heat of at least 250° Fahr. for not less than one hour, or the process of boiling, or, where this is likely to injure the articles, they are to be disinfected and steeped in boiling water. In all cases subsequent exposure of the articles to the air is enjoined before they are washed in the ordinary way. Articles of a soldier's kit that cannot be treated in this way are directed to be removed to the hospital, where they are to be fumigated and exposed to the sun and air for a week, beaten, and brushed. The time during which the windows of an infected room are to remain open is not stated, and will depend, we presume, on the judgment of the medical officer; but it should be several days, and a fire should be maintained in the room if it is intended to "flush it" with air.

THE NEW LICENSING BILL AND THE NEWCASTLE INFIRMARY.

THE House Committee of the Newcastle Infirmary have set an example to all similar committees by petitioning against the Bill of the Government proposing to extend the drinking hours in public-houses. The House Committee sets forth that 70 per cent. of persons suffering from accidents received at night are brought into the infirmary drunk, and that a large proportion of the remaining 30 per cent., though not actually drunk, are more or less under the influence of liquor. If the Government has elected in this matter to please the publicans and to disregard the public, there is, for the present, an end of the matter. But if it really wishes to co-operate with all the respectable forces in the country in abating the disgraceful vice of drunkenness, it will, even at the eleventh hour, respect such representations as those of the House Committee of the Newcastle Infirmary. Newcastle-on-Tyne has a population of 128,443. The House Committee of an infirmary is not apt to take extreme or sensational views of the licensing question, and it begs the House to refuse its sanction to any extension of the hours for selling drink. The Committee says that of the cases of accidents admitted last year, 367 were in a state of intoxication. This is at the rate of one a day, and implies an amount of facility for drunkenness which shows that, whatever good work there is before the Conservative Government, its assistance is not required to facilitate drinking. Should the Government still persist in using its great influence in pleasing the lowest section of publicans, then we shall look to the House of Lords to save the country from this discreditable legislation.

THE NAVAL MEDICAL SERVICE.

DR. J. L. DONNET, Deputy Inspector-General Royal Navy, who has completed three years' service at Haslar Hospital, has been superseded by Dr. T. R. Pickthorne, Deputy Inspector-General, recently arrived in England from the Naval Hospital at Jamaica. Dr. Donnet has been actively employed for more than two and thirty years, in the course of which he has served in every variety of climate, and seen much and varied service. He was present at the operations on the coast of Syria and at the siege of Acre; went through the arduous duties of the Polar expedition; was senior surgeon in the bloody but ill-fated attack on Petropauloski; had charge of the Naval Hospital at Lisbon; and on promotion was sent to assume the principal medical and administrative duties at Port Royal Hospital, where he was called upon to meet the heavy responsibilities of no fewer than three epidemics of yellow fever, and not without severe domestic loss. Recently, in Haslar, he has had under his care all the naval invalids from the Ashantee war; and the high professional skill and zeal he brought to that task are sufficiently shown by the able communication from his pen that recently appeared in these columns upon the Gold Coast fever as it affected our sailors and marines. For all this, and much more, Dr. Donnet has been indulged with a tenure of office for three years in a hospital at home, and is now relegated to the *res angusta* of half-pay. Truly his reward must be drawn from his inner consciousness; and, let it be added, from the sentiments of affectionate regard for himself and high esteem for his professional qualities with which he has never failed to inspire all, whether patient or colleague, who have enjoyed the privilege of either of those connexions with him.

If the Admiralty wish to rear and retain men of Dr. Donnet's stamp in the navy, they must adopt a very different style of treating arduous and distinguished services than has of late years ruled their practice. Seniors must submit to whatever may be meted out to them, but they will carry with them into the dreary flats of half-pay a sense of slighted claims and of penurious treatment that will not make them enthusiastic in depicting to their juniors the pathway they have themselves trodden, and which they in turn will have to pursue—unless, indeed, it be made smoother and more inviting by the introduction of a wiser and more liberal policy by the present occupants of office.

FEMALE GRADUATES.

THE women have certainly got something more than the thin edge of the wedge into the traditions of the University of London. For some time past they have enjoyed the rare and enviable privilege of being allowed to present themselves for examination in arts and science, but have not hitherto been permitted to take degrees. This was felt by some to be a hardship and an injustice. Accordingly, at a meeting of Convocation held in January last, it was proposed that this disqualification should be removed, and at the adjourned debate on Tuesday last it was carried by 83 votes against 65, "That in the opinion of Convocation it is desirable that women should be permitted to take degrees at the University of London." The discussion on such an important motion was, as might be expected, somewhat long and animated. The usual arguments for and against were freely used, but some of the speakers seemed to hit very wide of the mark, and few even of those who supported the proposition really appeared to be aware of the serious nature of the innovation they were attempting. For instance, there was considerable difficulty in making some comprehend that to admit women to the degrees of the University was to open to them the professions of law and of medicine. In fact, an impression had possessed some of the arts' graduates, and especially the mover of the proposition, that the University medical degrees were not qualifications to practise, or that, even if they were, women would not be able to use them, because in the Medical Act of 1858 the entrance of women into the medical profession was not contemplated, and that the Act speaks always of members of the male sex. This was, of course, protested against by the chairman, Dr. Storrar, who said that there was at least the name of one woman on the Medical Register. But not all those who voted for this motion were equally ignorant. One reverend gentleman made a special point of it that women would be able to enter the medical profession, for which they were specially and peculiarly adapted. With the peculiar bias that usually appertains

to the members of his cloth in medical matters, this gentleman argued that, as women are specially fitted for nurses, they would, *à fortiori*, become good medical attendants. He even endeavoured to raise the enthusiasm of his hearers by the use of poetry, and referred to the well-known lines—

> "When pain and anguish wring the brow,
> A ministering angel thou";

though he ought to have quoted the preceding lines which describe woman as "uncertain, coy, and hard to please." But this failing to produce any marked effect, he tried other tactics, and called upon Convocation to disregard the wailings and the jealousy of those who saw, in the future, an army of Amazons besieging their profession. This gentleman was followed by Dr. Quain, who remarked on the inconsistency of the last speaker in pointing out the special fitness of woman for a profession of which he knew nothing, whilst he entirely overlooked the peculiar adaptability of women for theological studies and pursuits. The question really is not merely an examinational or an educational one, but, as Dr. Quain argued, it attempts to subvert the distinctions existing between the sexes. The examinations of the University of London are fitted as the highest type of educational tests for men; but is it reasonable to suppose that they are also fitted for women? In vain did Mr. Crick—in his amendment, that no degree, but certificates only, should be given, and that women should be excluded from examinations in law, medicine, and science—point out the absurdity of calling young women and maidens Bachelors or Masters of Arts, of Law, or of Medicine. The medical and legal elements were nonplussed by the clerical and arts graduates, but whether the Senate will see fit to sanction this resolution, or whether it will regard the warnings that have been given by the history of the University of Edinburgh, remains to be seen.

INFANTILE MORTALITY IN ST. PANCRAS WORKHOUSE.

THE Local Government Board has again found occasion—and this time on ample grounds—to visit the St. Pancras guardians with its displeasure. It really appears as if nothing can go right in the workhouse of that large parish. We have over and over again endeavoured to draw the attention of the guardians to the greatly overcrowded condition of the workhouse, and to the absolute necessity devolving on them of making some provision for the inmates in excess of the certified number, either by enlarging the building or farming out a few score of the paupers. No steps, as far as we are able to ascertain, have yet been taken in either of these directions. One result of this overcrowding is now made painfully apparent. On a recent visit by Dr. Bridges, one of the Local Government Board Inspectors, that gentleman found, on making examination of the books, that during the past year there had been either received into or born in the workhouse 407 infants, of whom 89 had died, giving a mortality of 215 per 1000 for the year. This is certainly a large death-rate, and one calling for searching investigation into the condition of infant life in the house. The infants appear to have been chiefly fed on preserved milk and pork, and some of the guardians are inclined to attribute the untoward results, for which they are chiefly responsible, to the fact of the former article being largely diluted with water. In spite of what American physicians have written, we consider good condensed milk, such as is easily procurable now-a-days, to be a healthy food for children. Of the unsuitability of pork, however, there cannot be two opinions—nothing worse could well be given.

The nursing department appears to have been greatly neglected, the infants being entirely, or nearly so, under the care of pauper nurses, an arrangement certainly not encouraged even by the old Poor-law Board. One paid nurse would seem to be attached to the nursery, but on the occasion of Dr. Bridges' visit that lady, like Mrs. Harris, was conspicuous by her absence. The matter has been referred, in the old routine manner, to the Visiting Committee. We trust that the gentlemen forming this body will infuse some earnestness into the work before them. The questions of ventilation and space are the main ones which they will have to consider.

OUR POLICY ON THE GOLD COAST.

THE country is to be congratulated on the sound policy which the present Government proposes to adopt in regard to affairs on the Gold Coast—a policy which Lord Carnarvon expounded in the Upper House with singular clearness and statesmanlike ability. With the political and commercial interests involved we have nothing to do; indeed, as regards the latter, it is questionable whether these be not utterly insignificant compared with the loss of health and life entailed by our occupation of so unhealthy a station. During the late expedition we more than once adverted to the fact that the maritime district was the most unhealthy one on the Gold Coast, and that Cape Coast Castle was about the worst position that could have been selected for the seat of Government; and we suggested the expediency of selecting some position as a sanatorium on more elevated ground further inland, from which the garrison at Cape Coast Castle could be fed. Lord Carnarvon proposes even a better course—viz., that we should relinquish Cape Coast Castle in favour of Elmina or Accra, and erect a station on the hills (where the climate is known to be healthy), which should be to Elmina or Accra what Simla is to Calcutta. To the natural effects of a bad climate we have superadded those arising out of a total disregard for drainage and decency. Still, do what we may, there is no gainsaying the fact that the Gold Coast is a very pestilential climate. Europeans cannot exist there for any length of time, and our West Indian troops fare no better. Under these circumstances, nothing can be more judicious, on sanitary as well as on financial grounds, than Lord Carnarvon's proposal to have recourse to Houssas and native police.

METEOROLOGY IN THE PROVINCES.

AT the beginning of the current year, the first number of a small journal named *The Fenland Meteorological Circular and Weather Report*, edited by Mr. S. H. Miller, of Wisbech, was published in that town by Messrs. Leach. We are glad to draw attention to this very promising effort to record barometrical and other observations on the weather, and assure our readers that the report is, as to quality of matter and style of publication, well worthy of notice and imitation. Exact observations and records of this sort are very much required, and it would be well if the example set at Wisbech were followed in all districts of the kingdom. Such work would be invaluable to the officers of the Royal Observatory and other scientific establishments.

LEPROSY IN NORWAY.

A REPORT on Leprosy and Leper Asylums in Norway, presented to the Secretary of State for India, has just been prepared by Dr. Vandyke Carter, whose researches on leprosy and on fungus foot in India are so well known. Some months ago Dr. Carter went to Norway to examine the working of the leper hospital and leper asylums, and has published his experience in the report. He asserts that leprosy may be checked, and in time entirely eradicated, by

the sequestration of those afflicted, by which the possibility of hereditary transmission may be removed. Dr. Carter earnestly recommends that the principles which have been so successfully practised in Norway should be adopted in India. He further urges that leper statistics should be collected, that a leper census should be made yearly for ten years, both under medical supervision, that without delay leper hospitals should be established in or near localities where disease abounds, and that provision should be made for the erection of leper asylums in places already well known to be infested by lepers. But, to be successful, the measure must be thoroughly carried out, half-measures being fatal to success.

ST. GEORGE'S HOSPITAL.

ON Friday, the 8th inst., the governors of St. George's Hospital determined to appoint a resident medical officer, who shall not be less than thirty years of age, at a salary of £250 a year, increasing £10 a year until it reaches £300 a year, with board and lodging. This appointment will in no way interfere with the annual selection of house-physicians and house-surgeons from among the pupils of the hospital.

Lord Bessborough, on behalf of the Weekly Board of the Governors of St. George's Hospital, writes to *The Times* to allay the feeling of alarm caused in some quarters by the necessity of taking up the drains of the building for the purposes of improvement. The hospital is to be thoroughly repaired and painted, and this will occupy the time up to August, after which glazed drain-pipes are to be substituted for the present brick drains, which will be at once thoroughly flushed and remain unused for two months previous to the commencement of the drainage works.

THE COPPICE, NOTTINGHAM.

THE eighteenth annual report of this well-conducted institution has just been issued. The Commissioners in Lunacy state that the condition of the hospital and its inmates reflects great credit on the medical superintendent and all engaged in its management. During their visit they saw evidences of kind and judicious treatment, and received no complaint from any of the patients. No restraint or seclusion was employed during the past year. Dr. Tate, the superintendent, points out that the primary and most important object of the institution is the early treatment of acute and other cases in which there appears a fair prospect of recovery. We trust that Dr. Tate's recommendation on the necessity of enlarging the building—a recommendation that is supplemented and enforced by the Commissioners in Lunacy—will obtain the early and favourable consideration of the governors, who have the clear duty before them of carrying out the required improvement. Such asylums as the Coppice, in which patients are received who, while above the pauper class, are yet unable to pay the whole expense of their maintenance, are beginning to be widely appreciated. We would like to see a larger number of similar institutions in this country.

DEATH FROM CHLOROFORM AT CARLISLE.

THE *Carlisle Patriot* for May 8th contains the particulars of a melancholy accident whereby Mrs. Walker, the wife of a medical man, met her death on the 5th instant. It appeared from the evidence that the unfortunate lady was occasionally in the habit of inhaling chloroform to relieve the pain of facial neuralgia; that after an early dinner at 2 o'clock, and after Dr. Walker had left the house on professional business, she lay upon the sofa and was seen inhaling chloroform from a handkerchief. When Dr. Walker returned at 4.30 he found Mrs. Walker dead upon the sofa, with her face livid, the handkerchief pressed close to the face, and the mouth full of vomit. From this it seems probable that suffocation may have been the immediate cause of death. That the chloroform atmosphere inhaled must have been a very strong one appeared from the fact that the nose and mouth were slightly blistered by its action. The remark of the coroner, Dr. Elliott, that "no one should venture to take chloroform in the absence of some other person," is one in which we necessarily thoroughly concur.

THE OPHTHALMIC PLAGUE AT ANERLEY.

FROM a recent paragraph in *The Times*, it would seem that the experiment of removing the children of the Anerley schools affected with ophthalmia to Bow has not been successful. The experiment is considered at an end, and the children are returning, or have already returned. But the ophthalmia is not at an end, and a large proportion even of the children who were sent back certified to be fit for the body of the school have shown signs of the disease almost immediately. We sympathise with the managers. We can only make one suggestion—viz., that they put themselves, in regard to this question, into the hands of a first-rate consulting ophthalmic surgeon for six months, who should co-operate with the medical officer of the schools. The members of the Board should stipulate for a weekly visit from the consultee, and be guided entirely by the joint opinions of him and their medical officer.

NOTES ON THE HEALTH SERVICE OF ARMIES DURING WAR.

WE are glad to observe that Surgeon-General Dr. C. A. Gordon has put together his very useful series of notes on this subject, which have already appeared in the pages of this journal. The term "Health Service" is used as the nearest equivalent for the French "Service de Santé"; and Dr. Gordon has collated and epitomised a considerable amount of information as to the organisation and administration of the army sanitary services of Russia, Austria, Italy, Switzerland, the United States, and other countries, which, but for this *brochure*, would not have been accessible or easily reduced to a practical form.

THE DWELLINGS OF THE POOR.

IT is unnecessary for us to notice at any length the debate on this subject in the House of Commons, as we are taking other means of laying the facts of the case *in extenso* before our readers. Mr. Kay-Shuttleworth's speech was an accurate and able exposition of the whole question, and should he succeed in stirring up the Government to interest itself in this most important social problem, he will have done much to lay a solid foundation upon which to build his reputation as a member of Parliament. The unanimity of the House on the question was encouraging, and the speech of the Home Secretary is, we hope, merely the forerunner of vigorous action on the part of the Government.

SMALL-POX IN BIRMINGHAM.

THE importance of united medical action has recently been well exemplified in reference to the selection of a site for a special hospital for contagious diseases in Birmingham.

The Town Council, acting on the advice of the Sanitary Committee, last week decided to purchase premises in a populous district within half a mile of the Town Hall, and to convert them into a hospital for the reception of the numerous cases of small-pox now lying scattered in various quarters of the town. The recommendation of the medical

officer of health was in favour of this site, but medical opinion in the town was so strongly adverse to it that a memorial setting forth the impolicy of planting such a source of contagion in the centre of the town was at once prepared and presented to the Corporation, and as it bore the signatures of most of the physicians and surgeons of eminence connected with the medical charities of the town, it carried due weight with the Town Council, and they have wisely determined to abandon the proposed site, and to advertise for a more suitable one beyond the limits of the borough, and remote from the busy haunts of men.

IN answer to a question in the House of Commons last week, Sir M. Beach said vaccine lymph was supplied gratuitously to registered medical practitioners in Great Britain by the medical officer of the Privy Council. It was supplied gratuitously in the same way to registered medical practitioners in Ireland until August, 1871, but the main source of supply had been the Dublin Cow-pock Institution, which received an annual grant of £400 for Ireland alone, and supplemented this fund by the sale of the lymph to persons applying first, and by getting subscriptions from unions and dispensing districts. Since January, 1864, when the Compulsory Vaccination Act came into operation, the medical officers of dispensaries, who are the public vaccinators throughout Ireland, have for the most part derived their supplies from other sources—that is to say, they have vaccinated, as far as practicable, from arm to arm, and have stored lymph for future use in Husband's capillary tubes, which are provided for them by the guardians. The change was made in August, 1871. An epidemic of small-pox prevailed to a considerable extent at that time, and although it increased subsequently, yet it decreased in 1873 to the extent of one-sixth of the cases of the previous year, and it is still decreasing. It will be carefully considered whether it is possible to allow Irish medical practitioners the same facilities for obtaining a gratuitous supply of vaccine lymph as are enjoyed in England.

THE Sanitary Commissioner of the Punjab, in his last report, dwells on the fact that the people of the province are rapidly learning to appreciate the value of vaccination. The most ignorant of the villagers are becoming convinced that they have in the operation a sure means of saving their children from the risks and miseries of small-pox, and, when an outbreak of the disease declares itself, make urgent application for the aid of vaccinators. A great deal of this change of feeling is due to the example and precept of native gentlemen. Perhaps these intelligent Hindoos will shortly commisserate the condition of certain sections of English society, and visit us in order to remove the blind prejudices existing against vaccination?

MR. PETER PARRY has been elected to the office of Coroner for Flintshire, in place of the late Peter Parry, Esq., surgeon, Mold,—at the time of his death the oldest coroner in the kingdom. If we are well informed, the new coroner, who used to be deputy coroner, is by education almost a medical man. We congratulate him on his appointment, and would wish that he were not only almost but altogether a qualified medical man. Mr. Parry's competitor was Mr. W. R. Williams, solicitor, Rhyl.

MR. SCLATER-BOOTH has promised to introduce an amendment into the Public Health Act, by which rural and urban sanitary authorities will have jurisdiction over polluted private wells. At present, no matter how impure and contaminated the water may be, the sanitary bodies cannot prevent its use if the supply is not public.

THE occasion of the annual oration given last week before the Medical Society of London, by Mr. Brudenell Carter, was followed by a *conversazione*, which was very largely attended by members of the profession. Interesting objects and curiosities from various parts of the world were exhibited, and excellent microscopes and other instruments, by London makers, were shown, while valuable pictures by Sir Henry Thompson, Drs. Wynn Williams, Hare, and Ambler were placed on view. Altogether the meeting was a highly successful one, and reflected great credit on all concerned in its arrangement.

AMONG the items of news brought by the last mail from the Mauritius we have received an account of the late hurricane, which did so much damage to many buildings and to the sugar-canes of that island, as well as some intelligence as to the results of the employment of the Eucalyptus globulus, as a substitute for quinine, in the treatment of fevers of the intermittent type. It seems that the results have not been favourable to the new remedy, and that recourse had ultimately to be had to quinine in the cases wherein the eucalyptus had been employed.

IT would appear from a St. Petersburg paper that it is in contemplation to establish in that city a huge pharmacy for supplying the poorer classes with genuine medicinal agents at fixed and reasonable prices. Vouchers for obtaining the remedies will be distributed by members of the medical profession—a most wise provision, as it appears to us. The benefits of the institution will not, we hope, be usurped by well-to-do persons to the prejudice of the really poor—a state of things that often obtains among certain cities westward of Russia.

ON Tuesday last, Professor Owen distributed to the students of King's College Hospital the prizes and certificates of honour obtained during the past winter session, on which occasion the veteran biologist delivered a brilliant and instructive address. Professor Owen is so seldom heard in public now, that it is a source of sincere regret to us that we cannot reproduce in our columns his speech at King's College.

AT a meeting of the Sedgwick Testimonial Committee, held on Tuesday last, at Cambridge, under the presidency of Professor Humphry, it was reported that over £10,000 had been promised, and over £9000 paid, towards the purpose of erecting a geological museum in the University, which is to bear the name of the late Professor Sedgwick.

AT a meeting of the Royal Society, held on April 30th, the names, among others, of the following candidates recommended by the Council were read:—Prescott Gardner Hewett, F.R.C.S., Thomas Lauder Brunton, M.D., and Henry Wyldbore Rumsey, M.D., F.R.C.S. The election will take place in June.

THE Chancellor of the Exchequer will shortly lay before the House of Commons a statement showing the total number of pauper lunatics in each of the three divisions of the United Kingdom, and the proportional sums which would be paid to each division by the new arrangement proposed by him.

MR. COWPER-TEMPLE has given notice in Parliament that he will, on June 9th, call attention to the disabilities of female medical students, and move a resolution thereon.

IN accordance with a resolution agreed to at the Comitia held on the 30th ult., a banquet will be given at the College of Physicians on Wednesday, June 24th.

WE are glad to say that at a meeting of governors the ill-drawn and antiquated rule respecting the qualification of physicians to the Nottingham Hospital was altered so as to admit graduates of any university of the United Kingdom. This change is in accordance with the views we expressed on the subject.

WE understand that small-pox has broken out among the Third Lancashire Militia Regiment, which lately mustered at Preston for the annual training, and that there are now eight or ten of the men laid up in the Preston Infirmary suffering from the disease.

LA Société Nationale d'Encouragement au Bien of Paris has conferred the civic crown—the highest honour it can bestow—upon Dr. Brochard, of Lyons, late Director of Nurseries and Créches, for his works on the management and education of children.

THE Sunderland Infirmary lately received the munificent gift of £1000 from Mr. Alderman Tyzack, and the governors of the institution have resolved to name a ward after the donor. The same benevolent gentleman has also founded a dispensary at Monkwearmouth, at a cost of £1500.

AN address of congratulation was presented on Wednesday, the 6th inst., to the Duke of Abercorn, from the Council and Fellows of the College of Physicians, Ireland.

DEBATE ON VIVISECTION AT THE MEETING OF CONVOCATION OF THE UNIVERSITY OF LONDON.

AFTER the other business of the meeting had been disposed of,

Mr. R. H. HUTTON, M.A., moved—"That this House earnestly requests the Senate not to allow painful experiments on living animals, when not intended to be remedial or curative, to be in any case carried on in the physiological laboratory of the Brown Institution; (1) because such experiments are so far from being sanctioned by the late Mr. Brown's will, that he distinctly directed that 'kindness to the animals committed to the charge' of the superintendent should be 'a general principle of the Brown Institution'; (2) because such experiments, wherever their subjects are 'domestic animals,' are in all probability in contravention of the 2nd section of the 12th and 13th of Victoria, cap. 92; (3) because the connexion of this University with experiments of the vivisectional kind would be detrimental to its honourable position, and an outrage on the principles of a large class of its graduates."—In moving the resolution, Mr. Hutton urged as sufficient justification for such an action that experiments of this nature have been made at the Brown Institution, have been defended by the Senate of the University, and that no guarantee has been given that they will not be repeated. With regard to the first argument, it was true a legal opinion had been taken on the subject, and it was thought that there was nothing in Mr. Brown's will which forbad such experiments; but it was certain Mr. Brown founded the hospital to alleviate the sufferings and cure the diseases of animals, and it was a perversion of his intention to induce in them artificial diseases, and to perform on them experiments, even though great scientific results might thereby be obtained. Such experiments were actuated by love of men, as distinguished from love of animals, but the experimenters ought to go further and advocate the performance of the same class of experiments on human beings, as, for instance, on prisoners or on certain slaves, experiments which would, so far as human diseases were concerned, be more valuable than those on animals. Mr. Brown was a benevolent man, and in spirit such experiments were a perversion of his trust, and he (Mr. Hutton) hoped that in that manner they might forfeit the trust altogether. Another lawyer, if consulted, would probably give a different opinion, and it was impossible to anticipate how the verdict of judges would go. Being made on domestic animals, the experiments involved a breach of the law. The Bill referred to, when passed, had been discussed in the House of Commons with a special view to these questions, and a provision introduced without any consideration of motive against the "torture" of animals. The law had not been put in force on account of the difficulty of obtaining information within one month of the commission of the offence, the period within which only conviction can be obtained. Thirdly, the University of London covered in its freedom all moral opinions and religious beliefs, and yet they were committing themselves to the single creed of a belief in vivisection. Admitting that the majority were in favour of vivisection, it was a monstrous infliction on the minority to identify the University with a positive creed of this kind.

Mr. ROBERT HARROP, M.A., seconded the resolution.

A letter was then read from Dr. Burdon-Sanderson, Professor at the Brown Institution, which stated that although physiological experiments, mainly those by Dr. Ferrier, had been performed at the institution, it was not intended to continue them, and they had not been done in the laboratory of the institution, which was used exclusively for investigations relating to the nature and treatment of disease. In these slight operations were occasionally necessary, and it was unquestionably necessary sometimes to induce disease artificially; but no animal confided to care as a patient had ever been subjected to scientific investigation, but received as much attention as could be given to human beings.

Mr. F. HERSCHEL, Q.C., B.A., asked the House to consider what reasons had been given for agreeing to a resolution which was virtually a vote of censure on the Senate, which implied that cruel vivisectional experiments had been and were about to be carried out, and that with the sanction of the Senate. A very eminent legal opinion, that of the present Vice-Chancellor Hall, had been given that the experiments as performed involved no breach of the trust. In Mr. Brown's will was a special provision for the "purchase of diseased or injured animals, or their carcasses, for the promotion of science." It was said that all Mr. Brown had in view was a hospital for the cure of animals, but he distinctly said in his will that he had another object in his mind. If it were true that for the promotion of science the most valuable thing were to make experiments, was not that one object which Mr. Brown had in his mind when he made his will? Mr. Brown was farther seeing than Mr. Hutton gave him credit for, and his motives and objects more truly benevolent than Mr. Hutton imagined. Secondly, they were asked to affirm the extraordinary proposition that something was in all probability the law! As a lawyer, he himself should say that it was clearly and unquestionably not the law. The words of the Act were: "If anyone shall cruelly beat, ill-treat, overdrive, or torture." Mr. Hutton had affirmed that the subject of vivisection was in the mind of those who passed the measure, but from the collocation of words, he (Mr. Herschell) would have said that Parliament had in its mind costermongers rather than physiologists. Surely the word "cruelly" altered the whole aspect of the sentence. According to Johnson and Webster, the word cruel implies the infliction of pain for the pleasure it affords. Obviously the word was introduced for the very purpose of implying that there might be a justification for the doing that which caused pain. In spite of the occasional differences among lawyers, he would venture to say that Mr. Hutton would not find a single judge who would take his view of the Act. Thirdly, who asked the University to pledge itself? He must protest against a majority being asked on such a question to give way to a minority, which was what Mr. Hutton desired. Everything was a question of principle, or might be made so, and a man had only to say he objected on principle, and the majority must give way to the minority. The experiments were made as painless as possible, and only made to discover the causes of disease and its prevention, and not for mere scientific curiosity. They were asked to affirm the principle that it was wrong to give pain to any animal for the benefit of humanity, however great. Surely such a principle could not be maintained, for it was contravened every day when pain was inflicted on animals in killing them for food. If, then, it was not a wrong but a right thing, and was within the terms of the will, those who had charge of the institu-

tion would not be performing their duty if they did not do it. Surely, to take an instance, if animals might be killed for food always with some pain, it was right to give pain to an animal if by so doing the causes of a desolating disease could be discovered and its ravages stopped. He could not see a logical distinction between the two cases. The question of degree did not come into that of right or wrong. Mr. Hutton said, why not experiment "on criminals"? A rabid dog might be killed, but would it therefore be right to kill a human being who was rabid? They recognised a difference between the two cases. It might be as well for the man who was rabid that his life should be taken, but it would be the worse for all of them if there should be less regard for human life. They could not experiment on man, because they regarded a human being as higher than the animals whom he subordinated to his use and did so by living on them, by sacrificing them to save the lives of his fellow-men.

Rev. PHILIP MAGNUS, M.A., B.Sc., was not convinced by Mr. Herschell's legal argument, but believed that the question of cruelty might be left safely to the medical men, feeling that a certain amount of so-called torture might be justified if productive of a large amount of good. He could not but admit the principle which had been laid down, that in killing animals for the food of mankind they had already overstepped the limits which prevented them from inflicting a small amount of torture.

Mr. J. M. SOLOMON, M.A, denied that there could be any doubt in the mind of a lawyer that the word cruelty governed all those which followed.

A motion for the adjournment of the debate was then made and negatived.

Mr. HUTTON, in reply, considered that the facts in Dr. Sanderson's letter afforded ample justification for his resolution. Mr. Brown undoubtedly wished for scientific investigation, as far as it was for the benefit of animals themselves, no further. He would not trust the discretion of medical men, who would do anything for the sake of science, would even cause diseases in patients to last longer than they otherwise would for the sake of studying them. A theory might surely be right in principle, and yet not right to attach it to that University, and no one could say that the Brown Institution would not have a function of its own without a study of this kind. If it were right to inflict on animals horrible diseases, it was not right for that University to identify itself with a creed from which many of its graduates would wish to be severed.

On a division there voted for the motion, 16; against it, 59; and it was accordingly lost by 43. The result was received with cheers.

SANITATION AT THE INTERNATIONAL EXHIBITION.

THE so-called "sanitary" department of the annual Exhibition at South Kensington has up to the present time been of a very meagre and forlorn character, and has attracted but very few visitors. Closets, stink-traps, deodorisers, and disinfectants, are not always pleasant objects for contemplation, particularly when they suggest to Paterfamilias and the anxious mother horrible misgivings as to the state of the domestic drains and water-supply. It is well, however, that persons who occupy these responsible positions in society should, when their "high art" proclivities are satisfied in the upper regions, proceed to Class 9, in Room 23 of the South Corridor, and there examine many sanitary appliances of varied excellence, but all worthy of observation.

We have neither space nor inclination to describe *seriatim* the apparatus exhibited, but may call attention to several modes of ventilating houses, of which that exhibited by Dr. Ball (No. 5953) seems worthy of examination. There are about twenty plans for the ventilation of sewers, among which No. 5977 seems to claim a foremost place, but very few examples of disinfecting apparatus, and this, as we take it, is one of the most important requirements of all sanitary authorities. But No. 5990 works well, as we know from practical experience, and is not very costly in construction, but the six or eight manufacturers of these articles would have consulted their own interests in exhibiting. There are a great many filters, nearly all of which have been for some time before the public, but the "silicated carbon" variety is conspicuous by its absence, and No. 6004 appears to be the only variety of portable filters, although these latter are now so much in request. Water and earth closets exist in all variety; Moule is very strongly represented, and we think that No. 5973 appears specially worthy of notice. Several of these inventions may be clever and practical, but as the printed or written descriptions are by no means lucid, and no attendant is at hand to clear up matters, it is impossible to express any decided opinion upon them. But we are glad to call attention thus briefly to a somewhat unsavoury subject which is very important, although more allied to engineering than medicine.

Correspondence.

"Audi alteram partem."

THE HOSPITAL FOR WOMEN.

To the Editor of THE LANCET.

SIR,—I am deeply grieved to see that Dr. Meadows has so far forgotten what is due to himself as to write the letter which appeared in your impression of last Saturday.

In THE LANCET of the 2nd inst. I gave the grounds for my statement of the facts, to which Dr. Meadows has again taken exception, and which he says "completely misrepresents the truth." I see no good in continuing a correspondence which provokes sentiments so much at variance with what I believe to be right. I have no wish to retaliate on Dr. Meadows and his friends, or to imitate his example by imputing unworthy motives. I only claim for myself, as I am willing to concede to them, the credit of being actuated by a sincere desire to promote the good of the hospital, though I could not approve of the manner in which it was evinced by them. I beg to refer Dr. Meadows, or any of his friends who may like to satisfy themselves on the point, to the minutes of the proceedings of the Medical Committee, which will, I think, convince anyone that Dr. Meadows was labouring under a misconception of the facts when he made the incorrect statement in the concluding part of his letter. On the contrary, it will be seen that the issue, as to the matron's conduct, was raised at the outset, and in the broadest manner in paragraph No. 4 of the letter which was drawn up at the request of the medical staff, and led to the whole of the subsequent proceedings—in fact, that it did not, as Dr. Meadows asserts, arise incidentally in the course of their proceedings, but was part of the original complaint.

In conclusion, I venture to hope that everyone, after reading the minutes alluded to, will be convinced that the facts thus elicited warrant me in the belief that I have throughout this painful occurrence done nothing contrary to "my desire to do what is right towards my colleagues and the profession."—I am, Sir, your obedient servant,

PROTHEROE SMITH.

Park-street, Grosvenor-square, W., May 10th, 1874.

"PUNIC FAITH."

To the Editor of THE LANCET.

SIR,—I enclose a communication I have received from the Secretary of the British Medical Association, which will, I hope, terminate this unfortunate dispute.

Will you also permit me a word of explanation on a point on which I find there has been some misapprehension? My article was not written, as you state, when the question of the nursing was "coram judice." It appeared on the 14th of February, after the Committee of Management had come to a final decision, so far as they were concerned, by giving the sisters of St. John's House six months' notice to quit, but before the Court of Governors at which the arbitrators were appointed. It was my poor contribution to an endeavour that was then being made to induce the governors to submit the whole case to impartial arbitration. The justi-

fication of that agitation may be found in the fact that two such eminent judges as Lords Hatherley and Selborne, after a careful consideration of the evidence on both sides, decided in accordance with the strongly expressed opinion of the large majority of the in-patient medical staff. As to the article itself, with the exception of a single carelessly-worded paragraph, there is nothing in it I see any cause to regret, and nothing I would not willingly have substantiated by my name, had such been the custom of British journalism. I am, Sir, your obedient servant,

Curzon-street, Mayfair, May 11th, 1874. W. S. PLAYFAIR.

British Medical Association, General Secretary's Office, 37, Great Queen-street, May 7th, 1874.

DEAR SIR,—I herewith subjoin a copy of resolution passed at a special meeting of the *Journal* and Finance, and subsequently confirmed by a special meeting of the Committee of Council, relative to your communication of the 17th ult.

I am, Sir, faithfully yours,

Dr. W. S. Playfair. FRANCIS FOWKE.

Resolved—"That the Committee regret the circumstances referred to in Dr. Playfair's communication, and are of opinion that they arose from a misunderstanding. The Committee are of opinion that the most careful precautions are and ought to be always taken to preserve the confidential character of all editorial communications."

*** That the most careful precautions *ought* to be taken to preserve the confidential character of editorial communications to the *British Medical Journal* no one, we think, will doubt; that they *are* taken seems unquestionably a bold statement in the face of the facts that gave rise to this resolution.—ED. L.

REGISTRATION OF DEATHS.

To the Editor of THE LANCET.

SIR,—The custom of giving death certificates in the usual official form is surely foreign to those accurate habits of mind and expression which should characterise medical practitioners. I should like to bring before your readers a simple alteration which I usually make when I have not seen the corpse—viz., by inserting the words necessary to make the certificate read, "*I am informed* that he (or she) died..." Also, if there be any doubt about the diagnosis I usually certify "the cause of death was *I believe*," &c., or "*probably*" &c. I venture to think that the habit of using the ordinary form unaltered, sanctioned as it is by authority, countenances and thereby encourages too much pliancy in regard to other certificates. There are patients who seem to expect a medical attendant to testify their inability for duty, just as suits their own convenience, and to antedate or postdate by the same rule. On the other hand, it is instructive to hear how lightly medical certificates are regarded in some quarters.

In reference to the results of registration, could not death certificates be easily made to furnish a valuable mass of evidence as to the habits of life which favour the prevalence of various diseases?—viz., by stating the "occupation" or "condition in life" of the deceased.

I am, Sir, yours faithfully.

W. WILBERFORCE SMITH.

Eastbourne-terrace, May 12th, 1874.

PUERPERAL THROMBOSIS.

To the Editor of THE LANCET.

SIR,—In your interesting report, published on Saturday last, of the meeting of the Obstetrical Society of London, I find Dr. Playfair, in reply to the observations made on his paper on Puerperal Thrombosis, remarking as follows:—"There was not a single English text-book on Midwifery in which it (puerperal thrombosis) was even alluded to, not even in the recent and admirable work of Dr. Leishman." Now, I shall not answer for the learned Glasgow Professor, but I feel bound to point out to Dr. Playfair that in my work on Midwifery I have devoted a whole, though brief, chapter to it.—I remain, Sir, your obedient servant,

Edinburgh, May 11th, 1874. ALEXANDER MILNE.

BIRMINGHAM.

(From our own Correspondent.)

IN spite of the undoubted prevalence of an epidemic of variola, the death-rate of Birmingham (24 per 1000) is not unusually high; in fact, according to the recently-issued annual report of Dr. Alfred Hill, the medical officer of health, it is less than the average for the whole year 1873. The rate for the past year was 24·8, and it is rather remarkable that the death-rate for the ten years 1861–1870 is identical with that of the single year 1873. Dr. Hill recommends the immediate establishment of a hospital for the reception of cases of zymotic disease, and his recommendation, supported as it has been by the Midland Medical Society and by the general concurrence of the profession throughout the town, is about to be carried into effect to some extent by the Town Council. A building for patients (other than paupers) suffering from variola is to be at once opened, and doubtless it will hereafter be available for those affected with other kinds of infectious disease.

The Town Council have recently made arrangements for securing the gas-works of the town, and are now entering into a negotiation with the directors of the water-works company with a view of getting the water-supply into their own hands. Although opinion is divided as to the advisability of the corporation undertaking the manufacture of gas, there is no question that the water-supply, being one of the first requisites for the health of a town, ought to be in the hands of a responsible body elected by the ratepayers, and we hope that the efforts of the Mayor to bring about so desirable a result may be rewarded with success.

At the last meeting of the Midland Medical Society, Mr. Thomas showed an enchondromatous cyst which he had removed from beneath the right masseter of a female aged twenty-four. Mr. Lawson Tait demonstrated the formation of myelin tubules, and also exhibited a specimen of cholesterin prepared from beans. Mr. Wilders exhibited a large aural polypus removed from the wall of the meatus, close to the membrana tympani. Dr. Johnston afterwards read an interesting paper on the treatment of rheumatic fever, and quoted numerous cases showing the value of alkaline injections into the rectum.

At the final meeting of the Hospital Saturday Committee it was stated that the total amount collected this year was £4161, and that the amount available for distribution among the charities of the town was £3800. Towards this fund contributions were received from 1456 manufactories, showing an average of £2 12*s.* 9*d.* from each factory.

The Queen's Hospital Committee have decided to appoint an acting ophthalmic assistant for a period of twelve months, with the view of ascertaining whether there is a necessity for the establishment of a special ophthalmic department.

There have recently been two successful cases of ovariotomy at the Women's Hospital, under the care of Messrs. Bracey and Tait respectively. In Mr. Bracey's case the cyst was unilocular and free from adhesions; and in Mr. Tait's the cyst was multilocular, and had large omental adhesions, which were secured with silk ligatures, and returned into the abdomen. Wells's clamp was used in both instances, and perchloride of iron employed to dry up the pedicle. Mr. Tait speaks highly of the elastic ligature for deep fistulæ in ano. Mrs. Louisa Atkins, M.D. Zurich, who has done good service as house-surgeon for nearly two years, is about to leave with the view of entering upon private practice.

Lithotomy has been the most frequent operation at the General Hospital of late, and all of the cases have done well. Mr. Pemberton, who usually performs the median operation on children, was obliged, on Saturday, to resort to the lateral for the removal of a large stone, weighing four drachms, from a boy aged eight. Mr. Bartleet was fortunate with a lateral lithotomy in a child aged four, who was greatly emaciated by the irritation of a calculus which weighed six drachms, and also by protracted pertussis. The same surgeon has under his care a boy, aged eight, whose foot he removed at the ankle-joint on April 20th, by Jules Roux's method, and as he has in this, as in many previous cases, met with good results, it is worth while to

inquire whether it might not be employed in many cases in which other surgeons resort either to Syme's or Pirogoff's operations. Facility in the performance of the operation, freedom from sloughing, and greater rapidity of healing, are the advantages claimed for this kind of amputation. There have recently been several successes after Holt's operation for urethral stricture, by Mr. Baker and Mr. Jolly; two cases of traumatic stricture, of ten and twelve years' standing respectively, have done well, and the experience of the staff of the General Hospital is quite in favour of this mode of treatment.

Birmingham, May 4th, 1874.

Obituary.

RICHARD WILLIAM TAMPLIN, F.R.C.S.

MR. TAMPLIN, the well-known orthopædic surgeon, died, in the sixty-first year of his age, at his residence at Chiswick, on the 6th inst, of acute bronchitis, accompanied by cardiac deficiency. The death was somewhat sudden and unexpected, as, although suffering from the bronchial affection, he had seen his patients two days previously. His professional education was conducted at the London Hospital. Shortly after this he devoted himself to the study of orthopædic surgery, and in the year 1838, in conjunction with his brother-in-law, Dr. Little, assisted in establishing the Royal Orthopædic Hospital, with the help of Mr. Quarles Harris, whose influence in the city of London so largely contributed to its success.

Mr. Tamplin was best known to the profession by his lectures on "Deformities," published in the year 1846, and by his other contributions to orthopædic surgery. In the year 1842 he first divided subcutaneously the posterior tibial tendon for congenital talipes varus in infants, and although the method of operating has been since improved, the credit of its first performance belongs essentially to him. He had, moreover, a considerable reputation for the treatment of lateral curvature of the spine, his practice being based essentially on mechanical principles. He was, in fact, a firm believer in the curability of lateral curvature by means of spinal instruments. The treatment of cicatrices after burns also attracted his attention, and he proved that they would, in many cases, yield to gradual extension even where the contraction was very severe. The treatment of webbed fingers in children by making a perforation at the apex of the web with a small screw clamp, and then dividing the length of the web, is an operation for which we are indebted to Mr. Tamplin. In the treatment of joint-disease he was an ardent follower of John Scott, believing in the value of rest, and of the application of mercurial ointment and of bandages and splints.

It was with regret that the profession saw that Mr. Tamplin was obliged two years ago to resign his appointment as surgeon to the Royal Orthopædic Hospital in consequence of the difficulties which had arisen between the managing committee of the hospital and the medical staff. These difficulties, it will be remembered, had their chief origin in the defects of the nursing department and in the insanitary condition of the hospital. It was only after the representation of these defects had been unheeded that Mr. Tamplin felt himself called upon to sever from the hospital a connexion which had extended over thirty-five years—a step which was also taken by his colleague Mr. W. Adams.

HENRY DIGBY COTES DELAMOTTE.

MR. DELAMOTTE was born at Holywell in 1796. He was in early life sent to Oxford, and having gained sufficient educational knowledge, he entered the ranks of the medical profession, passing his studentship at the Middlesex Hospital, under Sir Charles Bell, Sir Benjamin Brodie, Mr. Mayo, &c., afterwards settling in Swanage, where he had since resided, proving himself a hard and skilful worker. No form was more familiar in houses of the poor, or more welcome in those of the sick, than Mr. Delamotte's. His fine figure, intelligent face, and genial manner produced a liking for him by everyone with whom he came in contact. In December, 1862, the poor of Swanage, being desirous to testify their esteem, gave him a very handsome and valuable tea and coffee service, with the following inscription on a massive silver kettle:—"Presented, with a silver tea and coffee service, to Henry Digby Cotes Dalamotte, surgeon, Swanage, by his friends and the poor in token of their respect and gratitude. December, 1862." In obstetrics he was most successful, having in his numerous cases never lost a patient; and his skill in surgery is best evidenced by his success in the treatment of the distressing accidents to which workers in the Swanage stone quarries are liable. Mr. Delamotte, although seventy-seven years of age, showed no signs of feebleness, being still a strong, hale man, requiring neither spectacles nor walking-stick. On the morning of the 13th of February he was in his usual health, had reached the house of a patient, and was about to ascend the stairs, when he dropped to the floor, dying instantly. He was interred in the cemetery on the 18th, when hundreds testified their respect by attending the funeral. Mr. Delamotte's father was of independent means, marrying a cousin of the late Duchess of Norfolk, by which the deceased became connected with many noble families holding a pedigree which few country gentlemen can boast of, it being dated from the Conquest. He leaves a widow and fifteen children, two in the medical profession.

SAMUEL DAY FEREDAY, F.R.C.S.

MR. FEREDAY, of Long Leys, Water Orton, near Birmingham, formerly of Dudley, died on the 14th of April last, in the sixty-first year of his age. Mr. Fereday was born on August 22nd, 1813. He entered St. Thomas's Hospital and West-street Schools of Medicine, where he became a distinguished student. He subsequently settled at Dudley, where he practised as a surgeon for more than thirty years. He was highly esteemed and beloved by his patients and an extensive circle of friends. He was consulting surgeon to the Dudley Dispensary, of which institution he was one of the founders, and one of the originators of the Guest Hospital. He took a great interest in all the other charities of the town.

Mr. Fereday was author of several papers, amongst other contributions, "On Two Cases of Paracentesis Thoracis in Children," and "On Lithotomy in Twin Male Children."

Mr. Fereday was Justice of the Peace for the counties of Worcester and Stafford and for the borough of Dudley. In his death the profession has lost an able and honourable member, and his widowed wife and circle a kind and affectionate friend.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the primary examination in Anatomy and Physiology on Tuesday and Wednesday last:—

P. F. Gilbert, C. P. Creed, A. W. Green, W. P. Turner, D. D. Malpas, S. V. Instone, A. M. Turner, and E. H. Paddison, Guy's Hospital; E. W. Livesey and A. E. Dicks, St. Bartholomew's Hospital; James Kilbride, Dublin; J. Sherburn, Glasgow and Edinburgh University; G. L. Coombs, W. H. Williams, A. Hodge, A. W. Kempe, and E. T. Chamberlain, University College; C. C. E. Beddoes and E. O. Scallon, King's College; H. Dobson, T. Harker, and W. J. Dodds, Edinburgh; J. N. Cooper and W. Armstrong, Manchester; H. Wickham and P. G. Young, St. Mary's Hospital; H. Collier, St. George's Hospital; J. M. M'Carthy, Aberdeen and Guy's Hospital; J. M. Jones, Edinburgh and Liverpool; W. P. Ashe, St. Thomas's Hospital; G. R. Cundell, University College and St. Mary's Hospitals; F. G. Heyman, London Hospital.

Of the 69 candidates examined on the above-named days, 37 failed to satisfy the Court of Examiners, and were referred to their anatomical and physiological studies for three months. The total number of candidates admitted to the primary examinations for the Membership during the last and present months was 442, of which no less than 133 were rejected. The next primary examination will be held in July.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on May 7th:—

Allden, John Horatio, Woodhouse, near Ely.
Ilott, Herbert James, Bromley, Kent.
Rayner, John Alexander, Hackney.
Shannon, Thomas Edward, Grantham.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH (DOUBLE QUALIFICATION).—The following gentlemen passed their final examination during the May sittings of the Examiners, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Davies, James Harries, Llanelwel.
Gailey, John Alexander, Annan.
Gorham, Patrick Charles, Clifden.
Hughes, Posthumous Walter, Flintshire.
Hurst, Hugh Frazer, Belfast.
Inglis, Thomas, Edinburgh.
Irvine, Tom Johnston, Lancashire.
Jockel, Louis Conrad, Edinburgh.
Kearney, Thomas, Dunmanway.
Pedross, Frank Hokins, Madras.
Scott, John Malcolm, Mid-Lothian.
Sharpe, Charles Edward, Coleraine.
Tyrrell, James Henry, Madras.
Walsh, Thomas Burke, Limerick.
Williams, Benjamin, Cardigan.
Wynne, William, Merionethshire.

The following passed their first professional examination:—

Hiffernan, James Eld, Mallow.
Thomson, Edward William, India.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen were admitted Licentiates of the College during the May examinations:—

Carey, William, India.
Coldstream, Alexander Robert, Edinburgh.
Denholm, Andrew, Duddingston.
Law, Wm. Geo. Lemuel, Samoa, South Pacific.
Pithie, John Young, Kirkcaldy.
Reid, Alexander William, Ceylon.
Stewart, Alexander Kennetth, India.

VACCINATION GRANTS.—Messrs. Ellis, of Cowle, Lincolnshire, and Mr. John Wm. Fry, public vaccinator for the No. 4 District of the Malling Union, have just received Government grants for efficient vaccination in their respective districts.

ROYAL FREE HOSPITAL.—The anniversary festival of this institution was held on Tuesday evening, at the Freemasons' Tavern, under the presidency of the Lord Mayor, who made an eloquent appeal on behalf of a charity which has lived unendowed for forty-six years, and which does incalculable good in the metropolis. During the evening subscriptions and donations to the amount of £2675 were announced, a sum that we trust will be greatly augmented in the course of the next few months. We would commend the Royal Free Hospital to the notice of the wealthy and benevolent.

Medical Appointments.

ADKINS, J. E., M.R.C.S.E., has been appointed Medical Officer of Health for the No. 5 Sub-district of the Plympton St. Mary Rural Sanitary District: £15 per annum; acreage 5930; population 3753.

AITCHISON, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Wallsend Urban Sanitary District: £30 per annum; acreage 1096; population 5000.

BARRETT, A. W., M.B., M.R.C.S.E., L.D.S., has been appointed Surgeon-Dentist to the London Hospital, vice H. J. Barrett, M.R.C.S.E., L.D.S., resigned.

BARTON, S. J., M.B., C.M., has been appointed Medical Officer for the Aldborough District of the Erpingham Union, Norfolk, vice Prangley, resigned.

CARTER, A. H., M.D., has been appointed Resident Medical Officer to the General Hospital, Birmingham, vice Rickards, promoted to Physician.

DRAPER, M. R., L.S.A.L., has been appointed Assistant Resident Medical Superintendent of the Bristol Lunatic Asylum, Stapleton, vice Benham, resigned.

EDWARDS, G. C., M.R.C.S.E., has been appointed a Medical Officer of Health for the Ipswich Rural Sanitary District: £4 4s. per annum.

HARDING, A. W., M.B., M.R.C.S.E., has been appointed House-Surgeon to the Croydon General Hospital.

HOGG, R. B., M.R.C.S.E., has been appointed Medical Officer for No. 7 District of St. Saviour Union, vice Wright, resigned.

KENNEDY, R., L.F.P. & S. Glas., has been appointed Parochial Medical Officer and Medical Officer of Health for Old Ardrossan, Ayrshire, vice Wallace, jun., whose appointment has expired.

KNOX, J. H., M.B., L.R.C.S Ed., has been appointed House-Surgeon to the Bootle Borough Hospital, vice Wills, resigned.

LEIGH, R., M.R.C.S.E., has been appointed an Hon. Assistant-Surgeon to St. George's Hospital for Skin Diseases, Liverpool.

LEWTAS, J., M.B., M.R.C.S.E., has been appointed an Hon. Medical Officer to the North Dispensary, Liverpool.

LIMRICK, W. S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Great Crosby Urban Sanitary District: £20 per annum; acreage 1849; population 3000.

LOUGHER, R., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer of Health for the Roath Urban Sanitary District: £50 per annum; acreage 900; population 9000.

LUCAS, S. A., L.R.C.P.Ed., L.R.C.S.Ed., Hon. Medical Officer to the North Dispensary, Liverpool, has been transferred to the East Dispensary.

M'ALDOWIE, Mr. A. M., has been appointed Resident House-Assistant at the Surgeons at the Royal Infirmary, Aberdeen.

MATTHEWS, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed a Medical Officer to the Waterloo Dispensary, Waterloo, near Liverpool, vice Allcock, deceased.

MAY, J., jun., M.R.C.S.E., has been appointed Medical Officer of Health for the Devonport Urban Sanitary District: £30 per annum; population 49,449.

MEADOWS, W. H., M.R.C.S.E., has been appointed a Medical Officer of Health for the Ipswich Rural Sanitary District: £4 4s. per annum.

NETTLE, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Liskeard Union Workhouse, vice Jago, deceased.

PALFREY, J., M.D., has been appointed joint Lecturer on Midwifery and Diseases of Women at the London Hospital Medical College.

PATER, W. T., M.R.C.S.E., has been appointed Medical Superintendent of the Staffordshire Lunatic Asylum, Stafford, vice Bower, deceased.

PAYNE, E., M.D., M.R.C.P.L., has been appointed a Physician to the North London Consumption Hospital, vice Brown, resigned.

PRATT, W. T. C., M.R.C.S.E., has been appointed Medical Officer to the Hearts of Oak Benefit Society, Newport, Monmouthshire.

SCAIFE, F., L.R.C.P Ed., M.R.C.S.E., has been appointed House-Surgeon to the Cumberland Infirmary, Carlisle, vice Cowan, resigned.

SECCOMBE, E. H., M.B., has been appointed Medical Officer to the Royal Pimlico Provident Dispensary, vice Dr. Bevise, resigned.

SMITH, F. A. A., M.D., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Branch Dispensary of the Cheltenham General Hospital and Dispensary.

SMITH, J. P., M.R.C.S.E., has been appointed Acting Ophthalmic Surgeon to the Queen's Hospital, Birmingham.

STEELE, H. O., M.R.C.S.E., has been appointed Medical Officer for the Gomersal District of the Dewsbury Union, vice Micklethwait, deceased.

STEELE, J. W., M.D., has been appointed an Hon. Medical Officer to the North Dispensary, Liverpool.

STEVENS, J., L.F.P. & S. Glas., has been appointed Parochial Medical Officer for New Ardrossan, Ayrshire, vice Wallace, sen., whose appointed has expired.

STOBBS, R., M.R.C.S.E., has been appointed Medical Officer for the Doncaster East District of the Doncaster Union, vice Lister, resigned.

TAYLOR, G. G. S., L.K.Q.C.P.I., has been appointed an Hon. Assistant-Surgeon to St. George's Hospital for Skin Diseases, Liverpool.

THORP, S., M.R.C.S.E., has been appointed Medical Officer of Health for the Rural Sanitary District of the Halstead Union, vice Andrews, resigned.

WEIR, A. M'C., M.D., L.R.C.S.Ed., has been appointed Assistant Medical Officer to the Nottingham County and Borough Lunatic Asylum, vice Smith, resigned.

WESTLAND, Mr. A., has been appointed Resident House-Assistant at the Royal Infirmary, Aberdeen.

WIGGIN, J., F.C.S., has been appointed Public Analyst for Colchester: 21s. per analysis for the first 100, and 10s. 6d. per analysis beyond that number, annually, and travelling expenses.

Births, Marriages, and Deaths.

BIRTHS.

LAWSON.—On the 3rd ult., at Enfield, the wife of T. C. Lawson, M.R.C.S.E. of a son.

MORE.—On the 8th inst., the wife of Dr. James More, of Rothwell, of a son.

MOWLL.—On the 2nd inst., at Parkfield, New Ferry, the wife of R. A. Mowll, M.D., Surgeon R.N., prematurely, of a son.

SUTCLIFFE.—On the 19th ult., at Denmark-hill, the wife of John Sutcliffe, M.R.C.S.E., of a son.

TINDALE.—On the 11th inst., at Hampton, the wife of Dr. Wentworth Tindale, of a son.

MARRIAGES.

EDWARDS—BAMFIELD.—On the 5th inst., at the Parish Church, St. Mary's, Scilly Isles, Alfred Edwards, M.R.C.S.E., L.S.A., of Amersham-park Villas, New-cross, S.E. (son of Thos. Edwards, Esq., of the Scilly Isles), to Annie Frances, daughter of Francis Bamfield, Esq., of the Scilly Isles.—No Cards.

GOSSE—BENNET.—On the 4th of March, at St. John's Church, Mount Pleasant, South Australia, John Gosse, M.R.C.S., of Moonta, to Mary, only daughter of the late John Bennet, J.P., of South Rhine, S.A.

DEATHS.

COWIE.—On the 1st inst., Robt. Cowie, M.D., of Lerwick, Shetland, aged 31.

DIBB.—On the 5th inst., E. N. Dibb, M.R.C.S.E., of Mexborough, aged 32.

EAGER.—On the 30th ult., at Burton Cottage, Woking, Surrey, Grace Isabella, the wife of Dr. T. Cawley Eager. [This announcement was inadvertently misplaced in our last issue.]

FOX.—On the 12th inst., Charles James Fox, late of Finsbury-square, aged 75. R.I.P. Friends will kindly accept this intimation.

MUNN.—On the 6th inst., at Calcutta, on board the Steamer "City of Manchester," Hugh S. Munn, L.R.C.P.Ed., late of Glasgow.

MURTAGH.—On the 11th inst., James W. Murtagh, L.R.C.S.I., of Gort, Co. Galway.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Hebra on Diseases of the Skin.
Mr. Whalley on the Eye.
Dr. Griffith's Universal Formulary.
Dr. Pettigrew: Physiology of the Circulation.
Mr. Onslow: "Tichborne."
Mr. Morris: French Revolution and First Empire.
Mr. Browne: Divine Revelation, or Pseudo-Science.
The Treasury of Natural History.
Mr. Tyler's Block Telegraph and Electric Looking Signs

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, MAY 14TH, 1874.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
May 8	29·63	N.W.	42	45	79	55	41	...	Overcast
„ 9	29·68	N.E.	40	45	83	52	38	...	Fine
„ 11	30·10	S.S.E.	43	49	92	56	39	...	Fine
„ 12	30·16	N.	44	47	77	54	40	0·04	Fine
„ 13	30·34	N.E.	47	51	74	59	45	...	Overcast
„ 14	30·38	WNW	42	50	...	...	48	...	Overcast

Notes, Short Comments, and Answers to Correspondents.

STARVATION AS A CAUSE OF INSANITY.

THE first volume of the Census Returns of the N.W. Provinces of India, with its accompanying Report by Mr. Plowden, contains a contribution on the statistics of infirmities by Dr. Cleghorn, who contends that the prevalence of insanity in these Provinces is attributable to the extreme poverty of the mass of the population. The Lieutenant-Governor points, however, to the fact that the number of insane in the N.W. Provinces is, when compared with other countries, very moderate, and that the appearance and physique of the population are such as to prove that they are not, as a rule, on the verge of starvation; hence the Lieutenant-Governor considers the instances quoted by Dr. Cleghorn as of a very exceptional character. We are unable to express any opinion as to the influence of starvation as a cause of insanity; but the diet of the lower agricultural labouring classes, as given by Dr. Cleghorn, seems to be quite insufficient for the preservation of health, and it is inferior in nutritive value, and less varied, than that allowed to prisoners undergoing labour. Behjur, the diet of the lower agricultural labourers, consists of a mixture of several grains, and the labourer and his wife live on this from year to year. Vegetables form no part of the dietary, except perhaps in the rains; oil is only tasted once a year when Sitla is worshipped; and salt is eaten in very small quantities once, twice, or thrice in the week. The tissues of the body are imperfectly nourished, and the brain, it is contended, early sympathises with the rest of the organism, and many of the cases end in fatuity and imbecility.

An Old Practitioner.—We have no knowledge of any surgeon living there.

A CURIOUS ACCIDENT.

To the Editor of THE LANCET.

SIR,—On Tuesday, April 21st, Dr. Gilbertson, whilst on his journey from Aberystwith to Llanrhystid, a village about nine miles distant, found a woman lying on the road-side in an exhausted state. He observed her hands to be covered with blood, and clothes also saturated. On being questioned, she stated that, in jumping off a bank, the handle of the umbrella which she had with her had entered the vagina, and that she had had a great amount of difficulty in getting it out. Dr. Gilbertson, however, gave no credit to her assertion, but took her into his carriage, and drove to an hotel at Llanrhystid. Slight hæmorrhage had been going on from the time he picked her up, but now became more profuse than ever. He got her put into bed, and then plugged the vagina. Seeing that she was very much exhausted, and having no other means than the plug of controlling the hæmorrhage, he telegraphed to me to come down armed with all necessaries. On my way I met two policemen, who were in search of a fœtus, having come to the conclusion that it was a case of concealment of birth. They pointed out to me several clots of blood on the road-side, which left no doubt in my mind that it was a case of abortion. On arriving at the hotel I found the girl very much exhausted and faint. Dr. Gilbertson then removed the plug, and hæmorrhage recurred. I made at first a digital examination of the uterus per vaginam, and to my great astonishment found the os perfectly closed, and the uterus of a normal size. I then swept my finger round the cervix, and found a small rent on its left side. We then washed out the vagina with cold water, and afterwards passed a speculum, through which we obtained a good view of the rent, which measured about half an inch in length. We then passed a small pledget of lint into it, which had been previously soaked in perchloride of iron. This immediately arrested the bleeding. On the following day she was doing well, having had no recurrence of the hæmorrhage. I then removed the pledget of lint. She is now fully recovered, having had no bad symptom from the time the lint was removed. It may be worth mentioning here that the handle of the umbrella was curved, and of the size of a large walking-stick.

I remain, Sir, yours truly,

T. D. HARRIES, L.R.C.P. Lond., M.R.C.S.E.,
Hon. Surgeon to the Aberystwith Infirmary and Cardiganshire
May, 1874. General Hospital.

THE PEMBROKE GUARDIANS AND THEIR MEDICAL OFFICERS.

THE law does not give the medical officer the power of *ordering* nourishment, but imposes on him the duty of prescribing or recommending it. He is to do this in the form of a certificate in writing, addressed to the relieving officer. The guardians or the relieving officer are not bound to comply with the recommendation.

Constab.—1 and 2. Yes.—3. Mr. Heath's Manual in connexion with any standard work on Surgery.

A SANITARY AUTHORITY IN THE DARK.

THE urban sanitary district of Godalming comprises within its small area of eighty-eight acres a population of between two and three thousand persons. The Town Council is the sanitary authority, and last year they appointed a medical officer of health for twelve months at a salary of ten guineas. Since his appointment this gentleman, it appears, has applied for an increase of salary, and at a meeting of the Town Council held last week this matter came under consideration in connexion with the renewal of the appointment. From the report of the proceedings in the *Surrey Advertiser* we gather that a long discussion took place about the office, and, in the absence of any report from the medical officer, the Town Council, it is said, "seemed to be somewhat in the dark as to the nature of the work done for the money." So the inspector of nuisances was called in to throw light upon this subject, and his report upon the medical officer's doings was presumably satisfactory, as the latter was reappointed at an increased salary of fourteen guineas per annum. What the result would have been if the subordinate official had felt himself constrained from any cause to depreciate the work of his superior can only be conjectured; but in any case the proceedings convey no very favourable impression of the perfection of our existing sanitary organisation as applied to small communities. That a sanitary authority should require to be enlightened by its inspector of nuisances upon the duties devolving upon its medical officer of health is just as orderly a proceedure as putting the cart before the horse.

Dr. Parkes' important paper, "On some points in the Dietetic Treatment of Diseases" shall be published next week.

L. M.—Apply to the Secretary of the Obstetrical Society.

THE ADULTERATION OF COCOA.

To the Editor of THE LANCET.

SIR,—Mr. Holm, no longer satisfied with his success as the scientific advocate of those mixtures of cocoa, starch and sugar, sold as soluble cocoas, comes now boldly forward to denounce the use of pure soluble cocoa. In the manufacture of pure soluble cocoa the superfluous part, about one-third of the cocoa-butter contained in the cocoa-bean, is necessarily and wisely removed, and this has proved to be the very mode required to render cocoa the valuable article of food which its constituents declare it to be, because the flesh-forming and heat-giving parts are in pure soluble cocoa so proportioned that the stomach assimilates the whole; while with the cocoa-bean, and still more so with the above-named mixtures, they pass through the body mostly undigested, and therefore unused. This desirable reduction of the cocoa-butter Mr. Holm ingeniously takes advantage of to deprecate pure soluble cocoa by declaring, on his own authority, that cocoa-butter is the most valuable part of the cocoa-bean, and that pure soluble cocoa is not a pure article at all, but must be classified with skimmed milk. With as much reason may Mr. Holm call meat no meat because we do not buy, nor could we consume, a superfluity of fat with it, as to make out in his way that pure soluble cocoa is anything else but cocoa; and if Mr. Holm is so convinced of the value of cocoa-butter, he can become a great public benefactor by buying for his purposes large quantities of cocoa-butter which I can very cheaply place at his disposal.

By kindly inserting these few remarks in your most influential publication, you will greatly assist in preventing the science of cocoa from becoming as much sophisticated as its manufacture has been for a long time.

I remain, Sir, yours truly,

Coleman-street, E.C., May, 1874. H. ESCHWEGE.

Mr. E. Pierce.—We are not aware of any disqualification. From the nature of the case it would be very rarely that such an appointment would be made, and the holder of the office of coroner might not like to accept the appointment; but we never heard of any actual disqualification.

THE WEST FUND.

To the Editor of THE LANCET.

SIR,—On the 28th March last you were kind enough to insert a short appeal in THE LANCET on behalf of Miss West, the daughter of Mr. William James West, who practised here many years since, and through whose instrumentality the operation of ovariotomy was first performed in a London hospital in the year 1839. Since this appeal appeared I have obtained either through interviews or correspondence promises to assist Miss West from Sir William Gull, Bart., Mr. Spencer Wells, and Dr. Habershon, besides a subscription of one sovereign from a physician who desires to remain anonymous. I now beg to reiterate my appeal under such auspicious circumstances on behalf of Miss West, whose claims to the liberality of the profession are most thoroughly endorsed by Sir William Gull and the other gentlemen above named, and who will act with me in considering the best way of disposing of any funds for Miss West.—Yours obediently,

Tunbridge, May 7th, 1874. JOHN GORHAM.

P.S.—It is requested that all subscriptions be kindly forwarded thus:—The West Fund. To John Gorham, Esq., Surgeon, Bayham House, Tunbridge, Kent.

Inquirer, (Bayswater.)—1. Macmillan and Co.—2. By Sir H. Bartle Frere, and to be procured of Murray.—3. The practice is described in the first volume of Schweinfurth's Heart of Africa, translated by Miss Frewer.

Dr. Edward Domville is thanked for his courtesy.

EFFECTS OF THE PRESENCE OF FOREIGN BODIES IN THE EAR.

To the Editor of THE LANCET.

SIR,—*Apropos* of Dr. Ogle's reference (in his paper on Epilepsy in your issue of May 2nd) to the occurrence of convulsive attacks produced by foreign bodies in the ear &c., I have remarked that the common practice of removing waxy concretions from the ear by a pin or sharp instrument is very generally followed by a spasmodic burst of coughing. Perhaps this may be a trite observation, but it is not the less interesting.

Yours truly,

May 5th, 1874. A. B. M.

THE COLLEGE OF SURGEONS FELLOWSHIP.

IN reply to *H. P.* and several other correspondents, we beg to repeat for the twentieth time that for the Primary examination for the Fellowship of the College of Surgeons a thorough knowledge of human anatomy and physiology is essential, and some general knowledge of comparative anatomy desirable. Gray's Anatomy, Heath's Practical Anatomy, Kirkes' Physiology, and Huxley's Manual of Vertebrata are, we believe, found sufficient as regards books; but a knowledge of actual dissections is a *sine qua non*. For the Pass examination in Surgery, Erichsen, Billroth's Pathology, Lawson on the Eye, Thompson's Clinical Lectures, and Holmes's System are to be recommended, and the examination includes the inspection of actual patients and the performance of operations on the dead body.

Mr. A. Redmayne.—The paragraph in question is entirely fictitious, and evolved out of the imagination of a lively French journalist.

BEYROUT AS A RESORT FOR INVALIDS.

To the Editor of THE LANCET.

SIR,—Beyrout is the principal port of Syria. Its population is estimated at 70,000. It is situated in lat. N. 33° 54', long. E. 35° 29', and lies not farther than three miles from the western base of the Lebanon. Its elevation from the level of the sea varies from a few feet to 200. Facing the north there is at its south-western extremity an extensive accumulation of sand, which, thrown up from the sea, is gradually drifting northward. To the east, and at some distance from the town, runs the Beyrout river, a small stream, which in winter is swollen by the mountain torrents, but becomes quite scanty during summer and autumn. Those who reside in the neighbourhood of the river to cultivate the soil are exposed to malarial influence, and suffer much from intermittent and remittent fevers.

The temperature of Beyrout rarely falls below 45° F. in winter, or rises higher than 85° in summer. From the daily observations taken by Dr. L'Orange for a number of years, the general mean given for each month is as follows:—

	C.	F.		C.	F.
January	11·84° = 53·31°	July	29·05° = 77·09°
February	11·45 = 52·61	August	26·34 = 77·61
March	15·38 = 59·68	September	24·31 = 75·75
April	15·87 = 60·46	October	22·15 = 71·87
May	20·06 = 68·10	November	17·96 = 64·32
June	23·18 = 73·72	December	13·80 = 56·84

The following observations of the barometer and thermometer, and of the humidity of the atmosphere, during the first five months of 1869, were taken by G. J. Eldridge, Esq., H.M. Consul-General, at an elevation of 170 feet:—

Barometer.

	Max.	Min.	Mean.
January...	30·30" ...	29·64" ...	29·93"
February	·23 ...	·38 ...	·26
March	·03 ...	·46 ...	·79
April	·17 ...	·63 ...	·92
May	·06 ...	·05 ...	·87

Thermometer, F.

	Max.	Min.	Mean.
January	63° ...	44·5° ...	54·72°
February	66 ...	43·5 ...	55·25
March	72 ...	50·5 ...	61·30
April	85 ...	53 ...	67·25
May	82 ...	61 ...	71·52

Daily variations between the Maximum and Minimum Thermometer, F.

	Max.	Min.	Mean.	Max. varia. for month.
January ...	9° ...	3·5° ...	6·16° ...	18·5°
February ...	13 ...	4 ...	7·29 ...	22·5
March	12 ...	4 ...	7·45 ...	21·5
April	18 ...	4 ...	8·60 ...	30
May	11·5 ...	4 ...	7·38 ...	21

Hygrometry: Variations between the Dry and Wet Bulbs.

	Max.	Min.	Mean.
January	8·5° ...	1·5° ...	3·73°
February	9 ...	1 ...	3·97
March	12 ...	1 ...	4·31
April	17·5 ...	2 ...	4·43
May	11 ...	1 ...	4·50

The largest amount of rain falls in the winter season; but it is not unusual to have heavy showers in the latter part of autumn and the earlier part of spring, forming "the early and latter rains," which are so important to farmers in Syria and the Holy Land. The rainfall varies from 20 to 40 inches, the general mean being 30 for the year. The following observations were taken by Dr. L'Orange during two consecutive years:—

Rainfall.

		Mm.		Mm.		Mm.	Mm.
1864	Oct.: 18·1	...	Nov.: 100·5	...	Dec.: 338·2	1013·9 = 39 inches.
1865	Jan.: 128·1	...	Feb.: 376	...	Mar.: 49	
1869	Oct.: 5	...	Nov.: 131·1	...	Dec.: 66·8	710·7 = 28 inches.
1870	Jan.: 160·3	...	Feb.: 189	...	Mar.: 134	
	April: 199·1					

The rains are generally heavy, sometimes exceedingly so, and they are often accompanied by violent storms; but such rainy days are few, and the most part of the winter season is sunny and fine weather, allowing invalids to go out almost every day. The prevailing direction of the wind in winter is S.W., sometimes N.; in the latter part of spring there are a few days of sirocco, E. and S.E.; in summer generally W., occasionally N.; in autumn N. and N.W. breezes are quite frequent.

Syria has no disease indigenous to itself. Leprosy is rare, and altogether limited to inland parts of the country. The "Aleppo button" is hardly ever seen, except in northern Syria, from Aleppo to Mosul and Bagdad. During the months of August and September purulent ophthalmia prevails more or less every year, specially among the natives, and is in some years very virulent and destructive to sight. On Mount Lebanon it is less frequent and of a much milder character. Of fevers, the most prevalent fever is the intermittent. Typhoid is not unfrequent, and often comes in the form of a mild epidemic, but its mortality is small. Cases of genuine typhus are hardly ever seen. Whooping-cough, small-pox, and measles present no special feature different from other countries. The Syrian fever (so called) is a kind of severe remittent, accompanied more by gastric than enteric symptoms. It attacks travellers who have been exposed to much fatigue, to the effects of the sun, and to malaria or humidity during night encampments. It appears to be of a paludal origin, modified and aggravated by the other circumstances just mentioned. Its gravity does not depend so much on its nature as on its subjects, enfeebled by travel and exposure and sometimes by privation. In Beyrout we occasionally see in summer and autumn an epidemic which is supposed to be indigenous to the place; it is called the "knee-fever" (abu-rikab), and appears to be an innocent form of febricula, terminating before the seventh day, and characterised by gastric disturbance, loss of appetite, foul tongue, &c., and severe pains in the loins and knees. Diphtheria has been clearly identified in a number of cases, many of which have been fatal, and yet the disease has been confined in Beyrout within a very narrow range. In Damascus and Aleppo it is said to have carried off a large number of children. It is very doubtful whether scarlatina exists in Syria. Some of the medical men of Beyrout assert that they have seen occasionally solitary cases of it. Some accidental erythematous rash attending a febrile throat affection may have been probably an occasion of error in diagnosis.

Of chest affections, bronchitis—sometimes running into the chronic state—is frequent in winter. Pleurisy and pneumonia occur generally in the same season. Asthma and emphysema are common at all seasons, but aggravated in winter. Tuberculous phthisis is comparatively rare, but sometimes well marked, and runs occasionally a short course. Its frequency compared with northern countries is certainly favourable for the climate of Syria, so far as climate has any influence over the disease. The slowness or rapidity of its course in different cases has probably more to do with the habits and special circumstances of individuals than with the direct influence of the climate or season. Phthisical patients who lead an active life in the open air, keep up their strength by proper nutrition, and avoid all depressing causes, suffer here as elsewhere the least from this complaint.

The following facts give a fair idea of the chronic diseases of Syria as they may be seen in hospital practice:—There were 425 medical and eye cases seen by Dr. Van Dyck or myself in the Dispensary of St. John's Hospital during the first three months of 1873. About 144 cases were admitted under my care into the hospital during that year. The acute cases admitted were few, the reason being the aversion of the natives to leave their homes and enter a hospital when they suffer from acute diseases. Some of the patients were Europeans, who came into the hospital in the last stage of disease. There were 11 deaths during the year, as follows:—Variola, 1; phthisis, 3; acute dysentery, 2; chronic dysentery, 2; chronic dysentery with ascites, 1; cancer of the stomach, 1; emphysema with dropsy of the pericardium, 1. The surgical cases admitted into the hospital were under the care of Dr. Post. Many of the operations were highly important and critical, and their safety was somewhat surprising, the rate of mortality from the major operations being very insignificant. Of 60 cases of amputation (major) performed by Dr. Varten in his hospital at Nazareth, it is stated there was not a single casualty. (Quarterly Paper of the Edin. Med. Miss. Soc., Nov. 1873.) All this speaks well for the air of Syria, though two other considerations should be added—namely, the strong Syrian constitution unvitiated by hard drink, and the idea of the late Sir James Simpson about "Hospitalism," the Nazareth Hospital having only 25 beds, and St. John's, Beyrout, 50.

It will thus be seen that Beyrout offers a hopeful prospect for invalids who may be advised to change their cold northern residence for a more temperate latitude. How far the climate of Syria may be useful to phthisical patients coming from northern countries, where cold winds and the humidity and changes of the atmosphere prevail so much, has yet to be tried and ascertained. So far as my observation and experience can be a guide, I should say that when the disease is not too far advanced, such patients, and invalids in general, will find the Syrian climate very useful. The early part of winter may be more favourable in Egypt; but in the latter part of it, and in the early spring, Beyrout offers superior advantages. In summer Mount Lebanon is a cool, healthy resort for invalids who seek pure air and water and fine scenery.

Old Beyrout is a small, close, and badly built place. The larger part of the town by far, however, is in the form of villas extending along the seashore, and on the slope which gradually rises from it. Many of them are well built and very comfortable, and have a fine view of the sea and of the Lebanon. Carriages and carriage-roads are increasing, and there are two handsome roads for driving and riding. There are several hotels in Beyrout, of which two are good. The steam communication with Europe is frequent, the shortest being *viâ* Brindisi once a week. The water is very good, while the Dog river water, which is now being brought into the town by an English Company, is considered to be of an unusually superior quality, the amount of organic matter in it having been found by analysis to be exceedingly small. There are two hospitals—a small one, attended by a French physician, under the care of Sisters of Charity; the other is supported by the Knights of St. John, and the nurses are four deaconesses from Kaiserswerth. The latter has one of the healthiest positions and finest views in Beyrout, and its management as well as the skilful devotedness of its nurses are above all praise.

Yours truly,

Beyrout, April, 1874. JOHN WORTABET, M.D.

Ex Uno Disce Omnes.—If our correspondent will reperuse our article on the Naval Medical Service, bearing in mind the rules which govern English composition, he will see that "the certainty of a high rate of pay and the prospect of an ample retirement" relate to the "future resident in India," and not to the surgeon in the British army, whose unsatisfactory retirement we are well acquainted with.

W. J. S.—It is not customary for a London surgeon, after having been paid 100 guineas for an operation, to send in an account for the subsequent treatment of the case, of which he has had the entire charge. Will our correspondent send us further particulars?

Mr. J. A. Davenport, (Nantwich.)—We never received the newspaper referred to by our correspondent.

An Inquirer.—There is no book of the sort that we recommend.

Mr. Alfred Ashby, (Grantham.)—We cannot call to mind the names of institutions of the size and character alluded to. Some of the army hospitals for women and children probably approach nearest to our correspondent's description, and he will find plans and sections of these in the Blue-book of the Army Medical Department for 1870.

Dr. Robert White is thanked for his note.

CREMATION.

To the Editor of THE LANCET.

SIR,—The subject of cremation is attracting much attention at the present time, and there seems to be an impression that it is desirable from a sanitary point of view. I cannot think it would affect our death-rate as much as some writers imagine, if at all. It is, I believe, a heathenish custom, and one not likely to be adopted by Christian people, or any who believe in the Bible. The Bible tells us we shall return to the ground from whence we were taken. (Genesis iii. 19.) No examples of cremation are found for our guidance that I am aware of, but numerous examples of "burial." I will only cite one: The Lord "buried" Moses in a valley in the land of Moab. (Deut. xxxiv. 6.) I am, Sir, your obedient servant,

Putney, May 8th, 1874. W. F. SHEARD.

*** Surely it does not follow that persons who regard the customs of the Hebrews as not incumbent upon other nations are necessarily, and on that account, disbelievers in the Bible. To call a custom "heathenish" is a short and convenient, but rarely a just and an intelligent way of condemning it.—ED. L.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson, London; Mr. T. Bryant, London; Dr. W. S. Playfair, London; Dr. Parkes, Southampton; Dr. Wilks, London; Dr. Morell-Mackenzie, London; Dr. Protheroe Smith, London; Dr. W. Squire, London; Dr. John Rae, London; Mr. W. K. Johnston; Mr. Thorp, Halstead; Dr. Vinen, London; Dr. Fothergill, London; Mr. Nettle, Liskeard; Mr. Wilberforce Smith, London; Mr. J. W. Fry; Mr. Saunders, London; Dr. Palfrey, London; Dr. Milne, Edinburgh; Mr. Robinson, Dublin; Mr. M'Dougall, Hexham; Messrs. German and Lossow, London; Mr. H. J. Cotton, Edinburgh; Dr. F. H. Smith, London; Mr. Vance, London; Dr. Davidson, Chester; Mr. Eager, Kingfield; Dr. Mackintosh, Downham; Dr. Gordon, London; Dr. Sheard, Putney; Mr. Milligan, Bradford; Mr. John Lucas, London; Mr. Pitts; Mr. Ellis, Doncaster; Mr. J. Williamson, Preston; Mr. Pierce, Denbigh; Dr. Blanc, Paris; Dr. Sutherland, Manchester; Dr. R. White; Mr Colman, North Walsham; Dr. Domville, Exeter; Mr. A. Redmayne; Mr. J. J. Thomson, London; Messrs. Miller and Lowe, Edinburgh; Dr. James, Newcross; Mr. T. W. Marshall, London; Dr. Eager, Woking; Mr. H. E. Paine, Chertsey; Dr. Arnold Smith, Kamptee; Surgeon Millar, Allahabad; Mr. Wellmore, Stockbridge; Mr. Harwood, Birmingham; Mr. Porteous, Glasgow; Mr. Clarke, New Wandsworth; Dr. Heffernan, Spennymoor; Mr. Simpson, Devizes; Dr. Hills, Chiswick; Mr. Ingpen, London; Dr. J. More, Rothwell; Mr. Leman, Chipping Sodbury; Mr. Sutton, Sittingbourne; Mr. Barker, Bury St. Edmunds; Mr. Hooper, London; Mr. Stokoe, Peckham-rye; Dr. Sturges, London; Mr. Bingham, Bristol; Mr. Morris, Pill; Mr. Binks, Wakefield; Mr. Freeman, London; Mr. Seymour, Coventry; Mr. Johnson, Middlesborough; Mr. Wagstaffe, London; Mr. Barn, Hanley; Mr. Welch, Camelford; Mr. Brown, Warrington; Dr. Strong, Cambeltown; Mr. O'Meara, Birkenhead; Mr. Odell, Hertford; Dr. Nattrass, Sunderland; Mr. Ryder, United Service Club; Messrs. Baillière and Co., London; Dr. March, Nice; Mr. Marshall, Woodbridge; Mr. Gorham, Tonbridge; Mr. Dearden, Accrington; Mr. Manning, Swansea; Mr. Meacham, Litchfield; Dr. Nicholls, Chelmsford; The Secretary of the Hospital for Diseases of the Throat; Royal Institution; The Editor of *The Country*; Anxietas; W. J. S.; L.M.; A Struggling Consultant; Hubert; Smilax, London; A. B. M.; &c. &c.

LETTERS, each *with enclosure*, are also acknowledged from—Mr. Smith, Hunslet; Dr. John Horne, Scarborough; Mr. Garnett, Rotherham; Dr. Morris, Guisborough; Mr. Armside, Penrith; Dr. Smith, Bastow; Mr. Kenyon, Bury; Mr. Clarke, Whitchurch; Mr. Oliver, Stockton; Dr. Prior, St. Albans; Mr. Hordley, Hartshill; Mr. Goddard, Leicester; Mr. Kirkham, Manchester; Mr. Davies, Tenby; Mr. Paterson, Rothsay; Dr. Anderson, Hendon; Mr. Beacon, London; Mr. Thursfield, Oxford; Mr. Bourjeaurd, London; Mr. Forsyth, Elgin; Messrs. Livingstone, Edinburgh; Messrs. Barker and Lafarelle, Coleshill; Mr. Carruthers, Inverness; Mr. Turner, Madras; Dr. King, Welwyn; Mr. White, Kensington; Mr. Halliwell, Redcar; Dr. Dickson, Buxton; Mr. Staniland, Cotham; Mr. Robertson, Melbourne; Mr. Miller, Colston Bassett; Mr. Bradshaw, Nottingham; Mr. Capers, Great Grimsby; Dr. Purdon, Worcester; Dr. Young, Yarm; Dr. Wigg, Falmouth; Mr. Ingle, Buxton; Dr. Walker, Corwen; Mr. Elliot, Harewood; Mr. Macartney, Liverpool; Mr. Dowding, Lonslade; Mr. Robinson, Runcorn; Mr. Paull, Ampthill; Dr. Gill, Sheffield; Mr. Harlock, Leicester; Messrs. Harvey and Reynolds, Leeds; Mr. Aubrey, Banwell; Mr. Roe, Ellesmere; Mr. Clarke, Morpeth; Mr. Deeby, Manchester; Mr. Hilles, Widnes; Mr. Watkinson, Stratford; Dr. Abbott, Leicester; Mr. J. Thomson, London; Mr. Yates, Oldham; Mr. Davidson, Carlisle; Mr. Mickler, Bow; Mr. Hopkins, Smethwick; Mr. Davies, Cymer; Mr. Akers, Ashby-de-la-Zouch; Mr. Hawthorne, Swansea; Mr. Heap, Bury; Mr. Woolley, Stone; Mr. Granger, Skipton-on-Craven; A. C. S., Bingham; Delta, Stockton-on-Tees.

Macclesfield Chronicle, Circle, East London Observer, Cork Constitution, Western Mail, Newcastle Daily Chronicle, Surrey Advertiser, Liverpool Daily Post, Isle of Man Times, Manchester Guardian, Northern Echo, North British Daily Mail, Western Morning News, Tamworth Herald, Scotsman, Sunday Times, and *Welshman* have been received.

Medical Diary of the Week.

Monday, May 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations on the Eye, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, May 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Rutherford, "On the Nervous System."
STATISTICAL SOCIETY.—7½ P.M. Mr. W. H. Millar, "On the Statistics of Deaths by Suicide among British Troops."—Mr. J. B. Martin, "On the Elections of 1868 and 1874."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Fibroma of the Ovary; Secondary Cancer of Uterine Mucous Membrane; Bladder after Lithotomy; Fatal Hæmoptysis in an Infant; Double Aneurism of Thoracic Aorta; Femoral Artery which had been tied with Carbolised Gut, and Gut Ligatures which had been subjected to the action of Wound Secretions; Mitral Stenosis with Hypertrophy of Left Ventricle; Cancer of the Portal Vein; Cylindrical Epithelioma of the Liver; &c. &c.

Wednesday, May 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, May 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. N. S. Maskelyne, "On Physical Symmetry in Crystals."
HARVEIAN SOCIETY OF LONDON.—8 P.M. Extraordinary Meeting for the Election of Trustees and Alteration of the Laws relating to the Expulsion of Members.—Clinical Cases, and Discussion thereon.

Friday, May 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Dr. Hoggan, "On a New Instrument for Cutting Sections, both of Hard and Soft Substances, for the Microscope."
CLINICAL SOCIETY OF LONDON.—8½ P.M. Proposed discussion on Dr. H. Weber's Cases of "Communication of Phthisis from Husband to Wife." Dr. Donkin, "On a Case of Diabetes treated by Skim-milk." — Dr. Buzzard, "On a Case of Tumour of Cerebellum." — Dr. Greenhow, "On a Case of Cerebral Rheumatism."
ROYAL INSTITUTION.—9 P.M. Prof. W. K. Clifford, "On the Education of the People."

Saturday, May 23.

HOSPITAL FOR WOMEN Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. A. Proctor, "On the Planetary System."

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